

MOTOR AGE

Vol. V No. 16

APRIL 21, 1904

Ten Cents



WINTON

CONTENTMENT

The Winton operator is a contented man. He knows his car is powerful, substantial and safe. He doesn't have to think of a dozen levers and pedals to operate, because a single foot-button gives him any desired variation of speed. He knows that he has bought the best car on the market. Prompt deliveries. The price—\$2500 f. o. b. Cleveland. Art catalog upon request.

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Member Association Licensed Automobile Mfrs.
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WINTON AGENCIES
EVERYWHERE

WINTON is King Long live the KING



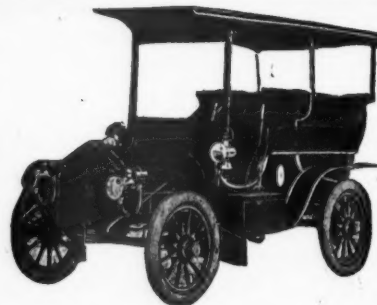
Light Touring Car

Having much the same outward appearance as our Runabout of 1903, but of higher power and capacity and distinctly a powerful touring car—not a Runabout—the most highly developed car of its type—the perfected product of the oldest makers of motor cars in America.

Price..... **\$1450**

THE 1904 HAYNES

Were the only 1904 models in the New York to Pittsburg run and earned Two FIRST-CLASS AWARDS.



Tonneau

With top and front glass, two Solar No. 1 gas headlights, two Dietz Regal oil lights, tail light, horn with tube, and full equipment.

Price..... **\$2550**
Without top and front glass..... **\$2450**

It shows fewer mechanical changes and contains more features that years of use have proved perfect in practice than any other, and is backed by an unequaled past record—seventeen contests entered—seventeen contests won, with stock cars.

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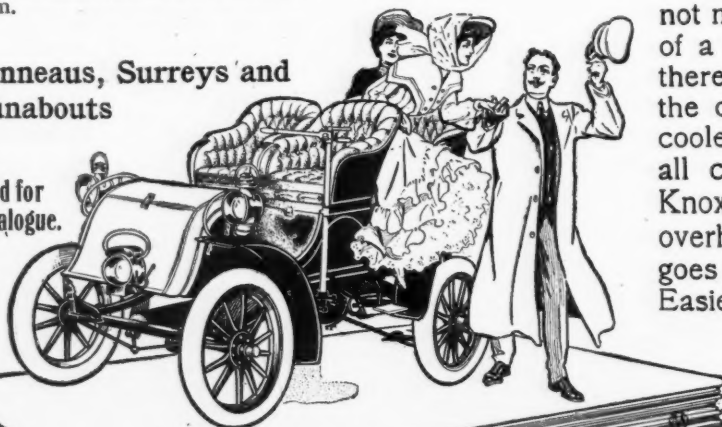
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There's luxury in running a Knox car.

KNOX AUTOMOBILE CO.
SPRINGFIELD, MASS.

Member Association of Licensed Automobile Mfrs.

Selling Agencies in all the Principal Cities.

MOTOR AGE

VOL. V. NO. 16

APRIL 21, 1904

\$2.00 Per Year

PROSPECTING VANDERBILT CUP RACE COURSE



THE START AND FINISH

NEW YORK, April 18—The proposed course of the race for the W. K. Vanderbilt, Jr., cup has been thoroughly explored by Joseph Tracy in the Peerless 1903 cup racer on several occasions, and last week it was photographed at all turns and at every control. The pictures show the many desirable features of the course and nothing against it. In fact, the route from Queens, along the Jericho road to the Hicksville road, thence along the Merrick road to Freeport, to Hempstead and the Hempstead road to Queens, was found ideal for racing. The surfacing is of macadam on all of these roads and is in fine shape.

Sitting on the floor of the car the photographer traveled the entire 42 miles without the slightest trouble from jars or jolts, carrying a camera in one hand and a plate box in the others. "Like riding on Ormond beach" was the verdict.

The Jericho road was as fast as any boulevard and practically as smooth as asphalt for over 12 miles. There were no ruts and no jogs, and the car sailed along in a manner that was pleasing and delightful. The turn at the Hicksville roads juncture was found to be a rising turn at a right angle, requiring the slowing of the machine for a successful turn.

Down the Hicksville pike the car sailed, passing through Hicksville, the entire road being equivalent in every way to the Jericho road. Turning into the Merrick road was

easy, as the car swung wide and without side slip. Down the famous Merrick road the travelling was again good and the Grand Avenue road from Freeport to Hempstead, while narrow, is excellent. The Hempstead road to Queens was likewise found in good shape and fast. The starting and finishing point is a V at Queens, and the cars must go 'round on a wide turn.

Controls will be established in Hicksville, which is about 22 miles from the start; at Freeport, about 30 miles from the start; at Hempstead, 5 miles further on, and at Queens, 7 miles further.

The trip of exploration was taken in a leisurely manner, stops being made at the East Wollaston hotel, half way down the Jericho road; at Powell's hotel, at the junction of the Jericho road and the Hicksville road; at Peter Killians' hotel, at the entrance of the Merrick road, where it joins the Hicksville

pike; at Freeport and Hempstead and at Queens. The hotel proprietors and the residents were found to be unalterably in favor of the race and such residents as were seen were likewise favorable to the holding of the contest on Long Island, especially as the local people will get their "bit" out of the race as guards at the cross roads and at all points where the people gather.

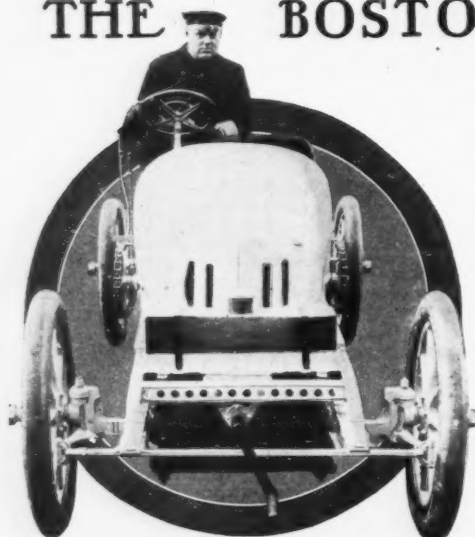
Mr. Tracy has been over the course a number of times, taking several prominent people with him, and on each trip he has done all possible to spread the gospel along the route among the people he met. As a result of the good work the people bear a kindlier interest toward automobilists in general and there was noticeable a kindlier feeling on the part of farmers along the route. The genial nods given were cheering in every way and as not one word was expressed adversely to the race by a score or more people interviewed directly, the impression naturally grew that America's first road course of importance had been found and won for the good cause.

Chairman Pardington when seen today said. "While it is not certain, I feel reasonably sure that the officials of Queens and Nassau counties and the local officials will be favorable. It will be some time before the definite announcement may be made and the chairman requests the drivers of cars to refrain from fast driving when going over the course, as such proceedings would inevitably result in arousing prejudice against motorists."



HALF WAY BETWEEN QUEENS AND JERICHO

THE BOSTON HILL CLIMB



MOTOR AGE
H. B. HILLS, JR., ON THE GEORGES
RICHARD-BRAZIER CAR

BOSTON, April 20—Two French cars, a 60-horsepower Mercedes and a 40-horsepower Georges Richard-Brazier, carrying off first honors yesterday in the annual Commonwealth avenue hill climbing contest conducted by the Massachusetts Automobile Club was a feature of the celebration of Patriots' day, a Massachusetts holiday in commemoration of the revolutionary battle of Lexington.

The contest yesterday was a much greater affair than that of last year both in number of participants and in spirited competition. There were forty entrants and thirty starters in the aggregate, three of the twenty-seven actual participants figuring in two classes each.

The contest started promptly at 2:30 p. m. An hour before obeying instructions from Chairman William Wallace, of the club's committee, the contestants reported to Clerk of the Course Kcenan and lined up to start in the order of their numbers and with the electrics first, gasoline cars next and steamers last.

Commonwealth hill was never in better condition, having been put into fit condition under the personal direction of Division Superintendent of Streets Francis McCarthy. First it had been raked of all loose stone, then

swept by a street sweeper, next watered and rolled and finally yesterday morning re-rolled. It was in excellent shape for speeding and it was certain from the start that last season's marks would be lowered. The gasoline car drivers also viewed it with confidence and vowed to beat the steamers at the game in reversal of last year's results. They did.

H. B. Hills, Jr., and his light 40-horsepower Georges Richard-Brazier had been tipped as the winning combination and the tip proved correct, with the qualification of division of tie honors with H. L. Bowden, of Boston, and the Mercedes which he drove in the Ormond beach speed tournament last winter. Each drove up the 1-5 mile incline in 15 2-5 seconds, 1 1-5 seconds better than the next best time of the day, that made by F. M. Marriott on a Stanley steamer, and 1 3-5 seconds better than the fastest mark scored last year, when Frank Durbin on a Stanley flew up the 15-per cent grade in 17 seconds. The best time scored by a gasoline car last year was 43 1-5 seconds, by F.



MOTOR AGE

H. L. BOWDEN AT THE WHEEL
OF HIS MERCEDES

E. Randall on a Stevens-Duryea, so the Bowden-Hills tie netted a gain of 27 4-5 seconds for this class. In electric cars there was a speed gain of 21 seconds. Messrs. Barney and Marvel, with a National and a Waverley respectively, negotiating the course in 1:15 3-5 each, as against the 1903 mark of 1:36 3-5

made by W. G. Titcomb on a Waverley machine.

The fastest time scored yesterday was 15 2-5 seconds, or at the rate 1:17 to the mile on an average 15-per cent grade. The slowest time was 1:29, an average speed per mile of 7:35.

The average time of the electric cars was 1:15 3-5 and the average horsepower of these cars 2¾.

The average time of the gasoline cars was 36 3-5 seconds and their average horsepower 18.

The average time of the steamers was 23 4-5 seconds and their average horsepower 6¾.

The general average time of all cars was 37 2-5 seconds and their average horsepower 15, giving a net result of the day's sport, of automobiling up a 15-per cent grade, at the rate of 3:07 to the mile or 19¼ miles an hour—fast enough to go from Chicago to New York in 52 hours were the route up a corresponding grade all the way.

The day was perfect for such an event. Despite the other patriotic and sporting attractions of the day, thousands lined the course on fashionable Commonwealth avenue. The police had its honest hands full keeping the course clear and the sputter of the motors beat a sharper reveille than that which called the minute men to arms when the U. S. A. was given birth. Battle was in the air; battle for glory and the spectators were expectant and ready to be thrilled. Foreign cars carried away a big share of the glory but they were not Britishers.

Fashion was out in force, not even being deterred by the horse show.

Much disappointment was evident on account of the absence of several entrants who had been counted among the star performers. Joe Tracy was unable to drive the Peerless 1903 racer on account of the burning of the clutch leather, as at Ormond, too late for replacement in time to compete. S. B. Stevens, of Rome, N. Y., the Mercedes amateur, wired Monday night that illness of his chauffeur kept him at home. This was especially regretted on account of the close, good natured competition between Stevens and Bowden, both driving 60-horsepower Connstadt-made cars.

The cars had been divided into general clas-



CONTROL AT FREEPORT



ON THE LONG ISLAND COURSE

MERRICK ROAD



ROCKY HILL ROAD



HICKSVILLE AND JERICHO ROADS

ses according to motive power, electric, gasoline and steam. The gasoline cars were subdivided into classes according to weight, the new A. A. A kilogram classification on the French basis being used. The arrangements had been carefully made and there was no hitch in the whole proceedings. The timing was excellent.

In the electric class C. H. Barney, National; and H. E. Marvel, Waverley, were the only starters, and both scoring even at 1:15 3-5 there was no decision.

In class A, for gasoline cars weighing from 1433 to 2205 pounds, competition was keen until Bowden rushed his Mercedes up the grade in :15 2-5, slashing 8 seconds off the inter-season Phelps record of :23 2-5, and beating his nearest competitor in the class by 9 2-5 seconds. This second man was Arthur Adams, Pope-Toledo. Charles Donahue, driving Harlan Whipple's 20-horsepower Mercedes, made third best time, :26 2-5. He would have probably made better time had his clutch not slipped. H. E. Rogers, Peerless, was fourth in :26 4-5.

H. B. Hills, Jr., with the light Georges Richard-Brazier of Gallion hill fame, was king pin in Class B for cars weighing 818 to 1433 pounds and his 15 2-5-second run up the hill was the more remarkable on account of beating all but one of all classes and tying that one. He started like a shot and never changed gears, rushing to the top on high speed. He easily made the hit of the day. Otto Nestrom with the stripped Stevens-Duryea racer of Eagle Rock hill climb fame, was second in this class, taking the hill in 18 4-5 seconds, while Kenneth A. Skinner with his little de Dion-Bouton Paris-Madrid racer was third just 7 seconds behind Nestrom.

There was disappointment in the running of the steamer trials on account of the withdrawal of one of the most promising candidates, Frank Durbin, Stanley, hero of last year's contest. He was at the line, ready to start, and just as the word was given a fusible plug blew out and as there was not sufficient time for replacement Durbin was forced to drop out. Marriott, Stanley, won in his class and also secured the steam record. L. R. Ross, Stanley,

ON THE LONG ISLAND COURSE

SUMMARY BOSTON HILL CLIMB

ELECTRIC CARS				
Class B—818 to 1,433 Pounds				
Driver	Car	H.-P.	Time	
C. H. Barney.....	National	2½	1:15 3-5	
H. E. Marvel.....	Waverley	3	1:15 3-5	
GASOLINE CARS				
Class AA—Over 2,205 Pounds				
Arthur Adams.....	Pope-Toledo	24	:29 3-5	
Class A—1,433 to 2,205 Pounds				
H. L. Bowden.....	Mercedes	60	:15 2-5	
Arthur Adams.....	Pope-Toledo	24	:24 4-5	
Charles Donahue.....	Mercedes	20	:26 2-5	
H. E. Rogers.....	Peerless	24	:26 4-5	
R. Hutchinson.....	Phelps	15	:31	
C. S. Henshaw.....	Thomas	24	:31 1-5	
James Baker.....	Phelps	20	:31 1-5	
D. Schultz.....	Thomas	24	:46 2-5	
Class B—818 to 1,433 Pounds				
H. B. Hills, Jr.....	Richard-Brazier	40	:15 2-5	
Otto Nestrom.....	Stevens-Duryea	14	:18 4-5	
K. A. Skinner.....	De Dion-Bouton	16	:25 4-5	
J. F. Duryea.....	Stevens-Duryea	7	:29 4-5	
James Baker.....	Phelps	20	:29 4-5	
R. Hutchinson.....	Phelps	15	:34 4-5	
F. W. Pulne.....	Phelps	20	:34 4-5	
W. O. Adams.....	Crest	8	:47 3-5	
R. F. Coburn.....	Crest	8	:48	
Charles Wilson.....	Ford	8	:52 3-5	
E. B. Ware.....	Crest	8	1:06 4-5	
Class C—515 to 818 Pounds				
J. C. Robbins.....	Orient	6	:33 2-5	
Guy Green.....	Orient	4	1:06 1-5	
Joseph Downey.....	Orient	4	1:29 4-5	
STEAM CARS				
Class A				
C. B. Grout.....	Grout	12½	:21 3-5	
Class B				
L. R. Ross.....	Stanley	6	:18 3-5	
John Carney.....	Waltham	4½	:42 2-5	
Class C				
F. M. Marriott, Jr.....	Stanley	6	:16 3-5	
K. M. Blake.....	Locomobile	4½	:20	

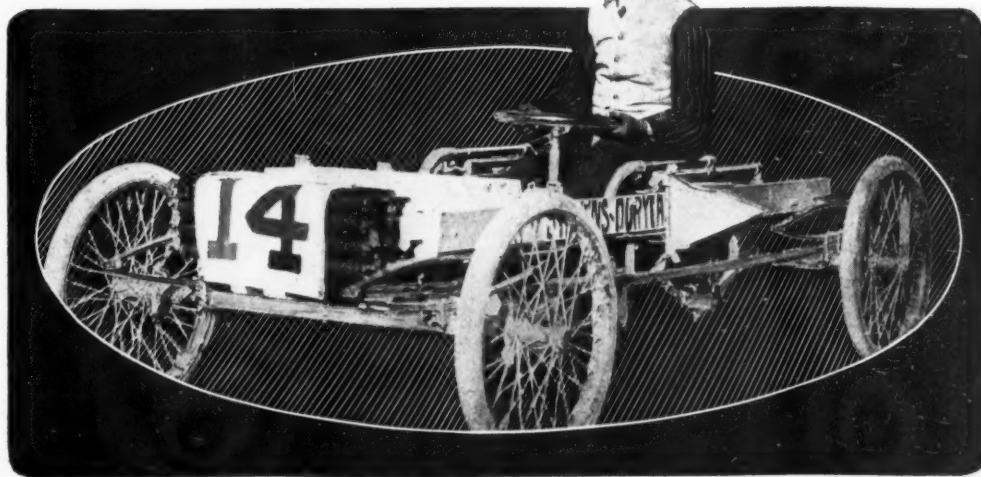
easily captured the honors in his class as did C. B. Grout, Grout, in his.

Class C for gasoline cars weighing from 515 to 818 pounds, was an Orient affair, in which J. C. Robbins scored first in :33 2-5.

The regular trials occupied so much time that there was no chance to run off the ties.

The complete summary of the trials is given in the annexed table.

The utmost satisfaction was expressed on all sides over the outcome of the contest, for while locally-made cars and cars made near enough to the Hub to seem homegrown were worsted by foreign-made machines, the owners of these latter were New Englanders and then, besides, the whole show was run so smoothly and fairly that there was no spirit of competition other than the gentlemanly rivalry of clean sportsmen. To the gasoliners the worsting of the steam fellows was a great joke, for the latter had always before held sway on the hill. The public was interested in this class competition as well as in the individual scrapping for honors, and, altogether, the affair was an excellent example of how successful a purely amateur sporting event may be made by friendly competition and able management. Patriot's day was well celebrated by the Boston automobilists.



MOTOR AGE

OTTO NESTROM ON THE STRIPPED STEVENS-DURYEA USED IN BOSTON HILL CLIMB

MOTOR AGE

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MOTOR BOAT SPEED

IF THE American builders of fast-going motor boats sustain their reputations made in craft construction, they must produce boats which will exceed 24 miles an hour; if some builders hold to their advertised guarantees in matters of speed, the foreign-built craft of 1904 will have been surpassed by some 11 miles to the hour.

It is up to the American makers to show that they can exceed 24 miles an hour, the present foreign record.

Last year 22 miles an hour was the speed limit abroad, made in official races; in America no official times were recorded. During the fall and winter the cleverest boat constructors and motor makers abroad sought to make a combination of boat model and power equipment that would exceed these figures, and this they just accomplished.

To beat 24 miles an hour will not be difficult; to make 35 miles an hour will be nothing short of wonderful.

Some American builders have advertised a guaranteed speed of 35 miles an hour for an automobile boat. In the absence of opportunity to make trials this is daring, indeed.

Still, it may not be impossible—few things are impossible these days—but the 35-mile man will now have to make good.

If he does it will not be convincing to foreigners, inasmuch as previous American motor boat times have been mere say-sos. The 35-mile boat, to sustain American reputation, must go abroad and prove its speed in an open contest with the boats which made such remarkable showings a few days since in the Mediterranean waters off Monte Carlo.

NEWSPAPER INCONSISTENCY

MANY of the large daily newspapers are disposed to pay little or no attention to automobile news. With a more or less prejudiced conception of news value the editors of such papers relegate the brief telegraph stories of big events to little odd corners of the paper and do not even deign to touch the less spectacular motor happenings. The paper may have special reporters for all other lines of news, but there is none for automobile news. No one on the staff knows the workings of the sport of automobilism, to say nothing of the pastime and the trade. It is

considered as an incidental source of news—a filler. Only its legal side—the arrest of motorists—is deemed to have real live news value. To mention a firm name in a story would be journalistically criminal, for it would create advertising value. Hence the paper would not consider for a moment the fitness of giving the trade name of a record breaking car in connection with the story of its onslaught on father time. There is no space in the paper for such advertising stuff. Space is needed to tell about the thirty dimpled darlings who constitute the cunning chorus of a cheap burlesque show where you may smoke if you like and learn why the chicken crossed the road.

American motoring news is treated as though it were nothing; meant nothing; was of interest to none. The endurance run of last fall merited about 3 inches a day in the Chicago papers, was styled a race and to the readers of those papers appeared to be some crazy affair in which No. 16 reached town first and No. 27 second.

American motoring is full of good news, which is easily obtainable. But the newspaper treats it as rot, fit to fill holes in the make-up or to bolster a Monday sheet when other news is scarce.

But let some European society or royal person discharge his chauffeur or set fire to his gasoline tank; let some obscure automobile club in the middle of Germany decide to erect a garage; let the King of England buy a new car or scorch down the public highway that he may give the horse laugh to the "bobby" who tries to arrest him—and a column story is cabled across the Atlantic and in the Sunday sheet given equal prominence with a cable concerning the political future of France or the German government's position in the matter of the Japanese-Russian war.

American motor news of real, live, permanent value is as nothing. Cabled tommyrot from Europe is important. This is the consistency or lack of it, as you will, of many a daily newspaper's conception of news value.

DRIVERS NEEDED

THERE is a scarcity of drivers of automobiles; not of racing cars or of Roi des Belbes touring cars, but of commercial vehicles. This is brought about by a peculiar condition. Young men will learn to drive commercial cars, and when well broken in will find out they can get higher wages driving pleasure cars. They enter the less arduous and more lucrative field. This thinning of the ranks of the commercial car drivers cannot be prevented just now. There is not such a superabundance of car drivers of all sorts that many are forced to remain in the commercial field and the latter branch cannot afford to retain the good men by meeting the salaries in the other branch.

Business vehicles must be run to save and to make money. They are no part of a fad or a passion. They represent a simple proposition in economics. The wages of the operators of the car have much to do with the cost of the service rendered by the car. The salaries paid to pleasure car chauffeurs are prohibitive in the business field.

One manufacturer of commercial automobiles said recently that the greatest hindrance to the progress of his branch of the industry was to retain drivers at wages that could be paid. He said the operation of the cars meant the constant breaking-in of new men, only to effect a constant donation of good drivers to the pleasure class.

This is a deplorable condition. The future of the commercial automobile is even wider than that of the pleasure car. It must have the men necessary to support and encourage its growth. There may arise an over-supply of pleasure car chauffeurs, which will force some of them back into the commercial field at lower salaries or one of two conditions of development may cause a change for the better in the situation as it exists. Commercial vehicles may be made of so simple operation that they may be entrusted to cheaper drivers, who are not actually skilled operators in the present sense of the term; or commercial automobiles may be made to be so cheaply operated and maintained and so efficient in service rendered that good salaries may be paid to skilled drivers without rendering the total cost excessive. This would seem to be the more desirable way. If by the automobile one wagon driver may in a day accomplish the work of three or four horse truck drivers it is well for him to be more skilled and get more money for his work.

FRANCE LOSING PRESTIGE

CHARLES JEANTAUD, an automobile manufacturer of France, contributes an interesting article in a recent issue of *l'Automobile* concerning the automobile trade in France. He lays great stress on the fact that the importation of foreign cars is increasing in a marked degree and that the exports for last season have not been double the amount of the preceding year's figures.

The first official record as to the value of imported automobiles and motor cycles is for 1898, when this value reached \$79,014; in 1899 the amount was \$94,600, and it increased to \$103,000 during the following 12 months. For 1901 the total was \$135,600; for 1902 it was \$216,000 and last year's figures show an increase of nearly \$90,000, the amount being \$301,600.

During the corresponding period, the value of automobiles and motor cycles exported by the French was: In 1898, \$349,879; in 1899, \$851,800; in 1900, \$1,883,400; in 1901, \$3,156,400; in 1902, \$6,043,800, and last year, \$10,178,400. Of the eight countries which were France's best customers last year England took the lead and bought over two-thirds of the total amount of exported cars the value being \$6,777,400. The United States occupy the second position on the list with a total of \$1,141,036. Belgium comes third, with \$1,059,800; Italy is fourth with \$585,200.

"We Frenchmen often speak about export trade," says M. Jeantaud, "and we say with reason that the French automobile industry is the first in the world and that the amount of our exports of automobiles passed the 50,000,000 franc mark in 1903. But we forget the other countries which are already sending machines to our country, and are competing with us in our best market.

"Our exports continue to increase, but the amount for last year is not double of the amount of the previous year and as has been the case within the last few years. Have we reached a critical stage and will we not pass in the future, this amount of 50,000,000 francs, which we reached last year? We do not think so. The amount of 50,000,000 francs reached last year shows the vitality of this industry and how much French products are appreciated in foreign countries. However, to keep our lead we must multiply our efforts, because the greatest amount of our exports reach the most industrious nations of the world."

JUMP

What a swell joke on the old world it would be if Winton Bullet II should go back into the cup race this year and win it.

The chief of the fire department of St. Louis, Mo., wants the city to buy him a \$1,200 automobile. And yet the speed limit in St. Louis is 6 miles an hour!

The city of St. Louis offers "free warfage to yachts, steam launches and house boats" during the time of the fair. Can it be that St. Louis hasn't yet heard of motor boats?

In the next London-Glasgow non-stop run cars must be brought into the night controls clean from stem to stern. A man with a garden hose could make money just outside the controls.

Anyone who thinks a balky automobile is the only thing on earth that does not always "work" satisfactorily should get one of the kind of stylographic pens with which these "jump sparks" were written.

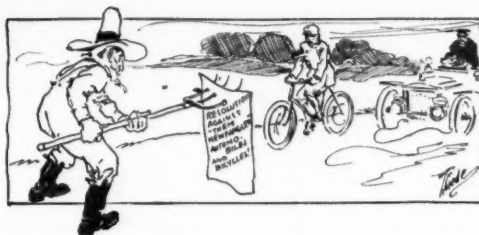
When the department of transportation at the St. Louis world's fair assigned the automobiles to that part of the transportation building which opens directly upon the Pike, which is the St. Louis Midway, it must just have come from the New York automobile show.

That variety of Cleveland policemen known in the local vernacular as "auto cops" may be equipped with motor bicycles. Then they will probably ride up alongside of automobilists, invite them to race, and when the speed limit is excelled, arrest them. Thus will the lowly two-wheeler give his big brother the "honk-honk."

The automobile industry is creative of honesty. In bicycle building days some of the workmen had a delightful habit of lugging bicycles part by part out of the factory that machines for personal use might be assembled at home. A man would stand a good chance taking a pressed steel automobile frame out under his vest.

One lone automobilist—Dr. Leisenring—in a western place, was the subject up for discussion at a meeting of sixty farmers in the village a few days ago. It was claimed that the doctor's automobile had caused much uneasiness among the farmers because of their horses frightening at it, so that in convention assembled they passed resolutions requesting that restrictions be placed upon it, and further threatening to refuse to get sick if he did not abide by their demands.

A Denver man asks one of the papers of his city if he would be justified in shooting reckless automobilists. The newspaper in reply concludes its negative answer with the following naive solution of the popular so-called "automobile situation:" "If the police can't arrest the mad chauffeurs, they ought to be able to take the persons run over into custody, so that they may be fined for being slow. It ought to be easy to arrest them, for they will be dazed and stunned or crippled and unable to run away and escape punishment."



One hundred and forty farmers of the vicinity of Wayne, Neb., have pledged themselves to catch, prosecute and mulet automobilists who frighten horses on the public road whether the drivers of the said horses are in, out or getting in or out of the buggies attached respectively to the said frightened horses. The funny part of the lengthy resolutions whereby these farmers have inaugurated their crusade is that bicycles are classed with automobiles as "new fangled vehicles" which create dangers upon the public highway. Wayne agriculturists are about 10 to 15 years behind the game.

Madame du Gast is not the only woman motorist playing in hard luck. A b-e-a-u-t-i-f-u-l member of a musical comedy company has been refused a license in Chicago because she is a non-resident. Now she runs her car without a number and dares policemen to arrest her. Thus far none has had the temerity, but the diligent press agent will probably succeed in causing trouble of that sort before she leaves town.

A local paper in Massachusetts says: "All the village automobiles have wintered well and their owners take as much pleasure as ever in dodging dogs, children and old farm horses." This editor is either sarcastic or looking forward to the days when automobiles will be given in exchange for country newspaper advertising.

Omaha will take no chances. In an automobile ordinance now pending is a provision whereby licensees must give a bond for \$100. Inasmuch as the speed limits named in the same ordinance are 6 and 8 miles for different parts of town, it is probable that a mighty fuss will be soon started in Omaha.

That Fischer truck which in the A. C. A. commercial vehicle test carried a load of 50 half-barrels of beer to Yonkers each day and was able to return in good shape for the next day's task was certainly all right.

The two and three-point ball bearing discussion of bicycle days seems to have its automobile trade counterpart in the discussion concerning the number of motor cylinders that is best.

Commonwealth hill has become so easy for automobile climbers that the Boston motorists might improve their annual hill test by having next year's race up the Bunker hill monument.

Hooray for Australia! On a recent club run of the Automobile Club of Victoria seventeen of the thirty-four cars in the line were American, nine French and eight English.



SPARKS

Kansas is O. K. It comes to the front with an "automobile, bicycle, carriage and agricultural implement garage."

Anyway Bobby Walthour, Major Taylor and a few other Americans will give 'em a run for their money in international bicycling about the same time.

A man in middle New York is building an automobile out of parts of old bicycles, harvesters and buggies. Others who have tackled a similar game might be mentioned.

It is not only the racing game that has been struck by the big car fever. Last year at Trenton, N. J., 80 per cent of the applications for automobile licenses were to operate light cars; this year but 3 per cent. Look out for Trenton!

There is a chance that there will be a Darraq car on each of the French, English and German international cup race teams, this car being manufactured in these countries. What an elegant chance for "team work." Ought to man these cars with old bicycle riders.

The Chicago Tribune has discovered that automobilists should be numbered so that they could thereby convince the public they knew what they were doing. If this same principle were applied to all lines of enterprise a whole lot of people would be put out of business.

That, according to a recent decision, the fines collected from automobile speed law-breakers in New York city should go to the Society for the Prevention of Cruelty to Animals, means in a way the return of the fines, for surely the greatest ally which the society has is the automobile.

Suggestion for window card in an automobile salesroom:

up,
business
own
our
running
busy
too
are
We
To
spend
time
running
our
competitor's
down.

Human nature is proving itself to be the same in automobiling as it was in bicycling. Bright spring days made bicycle sales. Every man knew that rain and mud today, it would be bright and dry some day; that the summer would hold many pleasant cycling days. But he put off the purchase of a bicycle until the warm, seductive breath blew on his cheek. Then he blew into a bicycle store and bought a machine in a rush. It is the same in the automobile trade. Hundreds and hundreds of purchasers intend to buy automobiles. They know the summer will come; that they can best provide for it by ordering a car early. Yet they postpone, and business is dull. Then bright, warm weather comes and they rush into automobile stores and want cars on instant delivery.

WINTON ENTRY IS MADE

Bullet II Will Be In American Eliminating Trials—Owensey May Drive—Benz Car Not Being Ready, No German Trial Events Will Take Place Mercedes and Opel Darracq Only Entrants

New York, April 18—Alexander Winton's formal entry of Bullet No. 2 for the American team in the international cup race was received at the Automobile Club of America this morning. Mr. Winton, in making the entry, which was accompanied by a check for \$600, says he will not pilot the car himself, but will furnish a competent driver for the contest. It is generally assumed that Harry Owensey, of Cook & Owensey, the Washington agents of the Winton company, will be the pilot named. Owensey was a confrere of Percy Owen in the early days of Winton participation in the racing game and bears the reputation of being a bold driver, a cool and ready tactician and a clever mechanic.

Up to this morning no further entries for the team had been named, nor had Secretary Butler or Charley Wridgway yet heard of the arrival of the Peerless cup candidate, which was reported to have been shipped from Cleveland to this city last Thursday night, though a wire came from Mr. Mooers this morning, saying he would be at the automobile club on Thursday.

There is an oft-expressed hope here that the result of H. B. Joy's conference with the Packard company will be the entry of the Gray Wolf for the team. Mr. Joy is quoted as saying on his visit to this city last week: "The Gray Wolf is a wonderful machine for its power. It has gone a mile in 46½ seconds, although of but half the power, for instance, of the Peerless car, which went only a second faster. I know that, with Schmidt driving, the Gray Wolf would go through the race, although Schmidt says we could not win. I am not so sure about it as he is. The car that goes through without trouble is likely to be a light car, and a car that has been tried and not found wanting, like the Gray Wolf. The Americans must finish this race whether they win or not, and the Gray Wolf can do that."

It is probable that the matter of Barney Oldfield's reinstatement will be settled at a meeting of the racing board which Chairman Pardington hopes to bring about tomorrow. The chairman received several replies this morning from board members to his letter submitting Oldfield's application for reinstatement, but refuses to forestall the action of the board by disclosing their contents.

Barney is very anxious for reinstatement and is eager to drive a car in the international cup race. He says that he has had some talk with the Peerless people in the matter, and, on the other hand, that Mr. Joy invited him to visit the Packard factory, and intimated that his company might build a Gray Wolf II for the track circuit if he should be engaged.

The German Automobile Club has decided not to hold an eliminating race for the selection of the third German representative on the team for the cup race. It appears that the manufacturers of the Benz racer informed the club officials that they could not get the intended racer ready in time for the event, while the Neue Automobile Gesellschaft, of Berlin, which also intended to take part in

the race, withdrew a few weeks ago. Troubles of another nature were met by the German club, the local authorities in Schleswig, where a road had been selected, had made so many inconvenient arrangements that the race would have turned out to be a parade instead of a speed contest. Inasmuch as the only other German automobile concern interested in the trial race had informed the officials in Berlin that their cars would be ready, it was practically decided to select one of them without holding a race, and thus the German team will comprise two Mercedes and one Opel-Darracq car. The Benz people depended almost entirely upon Madam du Gast to be successful in the preliminary race, and with her forced withdrawal they seemed to have come to the conclusion that they could not have been successful even if their car had been ready.

It is reported that 2,000 rooms have been rented up to date in different hotels and private residences in Homburg. Fully as many rooms are still vacant. Among those who have secured rooms in a single hotel are Prince and Princess Henry of Pless, Prince Leopold Friederich and Prince Joachim Albrecht of Prussia, Grand Duke and Grand Duchess von Mecklenburg-Schwerin, Prince Hohenlohe-Oebringen; Duke von Ratibor, president of the German Automobile Club; Roger Wallace, president of the Automobile Club of Great Britain and Ireland; Duc d'Arenburg, Baron de Rothschild, of London; Gray Dinsmore, representative of the Automobile Club of America; Mrs. Gerard Leigh, of the Ladies' Automobile Club of Great Britain. The representatives of the French, Belgium and Italian automobile clubs will also stop at this hotel.

According to a cablegram the following drivers have been selected by the French manufacturers to drive their cars in the eliminating race, which will be run next month: Panhard-Levassor—Henry Farman, Teste and Tarte; Mors—Salleron, Leger and Lavergne; de Dietrich—Gabriel, Jarrott and Baron de Forest; Darracq—Beconnais, Baras and Wagner; Serpollet—Le Blon, Pelzer and Chanliaud; Gobron-Brillie—Rigolly, Duray and A. Burton; Hotchkiss—Henry and Achille Fournier and Baron de Crawhez; Turcot-Mery—Rougier and La Touloubre; Richard-Brasier—Stead, Caillois and Thery; Clement—Henriot and Weigel.

The eleven racing cars which will compete in the British eliminating trials were registered at the Automobile Club of Great Britain and Ireland last Saturday. They were five Napiers, three English-built Darracqs and three Wolseleys. The Hutton racers were not ready.

L'Auto, of Paris, has completed the arrangements for its Gordon Bennett caravan. Starting from Paris June 12, the Taunus road will be reached June 14, after passing through Nancy, Strasburg and Heidelberg. June 15 will be resting day, and the next day the members of the excursion will see the weighing of the cars and the final preparations. June 17 the race takes place, while the next day will be spent either in going over the course

or in excursioning in the neighborhood. Sunday, June 19, those who wish may go to Frankfurt to see the race meet which will be held in the afternoon. The start home will be made June 20, by way of Luxembourg.

The expenses for the trip, which will last 10 days, will amount to \$92 for those who stop in Wiesbaden, which is only 8½ miles from the circuit, and \$80 if the stopping place is made at Mayence, 18½ miles from the center of the event.

In either locality the member of the excursion will have a front room on the first or second floor of the hotel and the expense also includes the transportation of baggage to the Paris railroad station and all along the line of the caravan, garage of machines and gratuities. The expenses for a mechanic will amount to \$18.

WILL PLAN BIG PARADE

New York, April 17—The governors of the Automobile Club of America have suggested to the runs and tours committee that it promote a great general parade of motor vehicles this spring. May 14 was the date suggested, but as the speedway and firemen's parades come the same day it is certain that at its meeting tomorrow another day will be chosen. The committee, members and automobilists at large are enthusiastic over the idea, and it will no doubt be carried out on a grand scale.

It is believed that a show of numbers and a display of great aggregate money value will impress legislators, the authorities and the general public with the magnitude of the new sport and industry to the end that more reasonable legislation and less prejudicial enforcement of the law may be secured. Such was the effect of the big bicycle parades of other days.

It is suggested that the parade be segregated by divisions headed by famous racing machine and followed by big touring cars, the middle weight and lighter classes coming next in the order of weight. A classification by motive power will also be made and a provision for a commercial vehicles division also be arranged.

PROTOCOL IS ARRANGED

Chicago, April 19—There seems to be a truce for the time being in the war between the city of Chicago and the automobilists. Granville W. Browning, who has headed the corporation forces in the campaign, has spiked his heavy guns, and the police have ceased making arrests. Mr. Browning has been preparing two ordinances which he thinks will fit the occasion and be satisfactory to both parties. He was unwilling to state just what the provisions of his ordinances would be when presented to the city council, but said he thought the Chicago Automobile Club would find no serious trouble with them.

Meanwhile Attorney Sidney S. Gorham, now secretary and director of the Chicago Automobile Club, has been going on quietly with his fight, using injunctions to circumvent what the club considers the illegal acts of the city officials. The method used in the Banker injunction case has been followed, Mr. Gorham going a step further. I. V. Edgerton was arrested Tuesday a week ago for running his automobile without a license number and Mr. Gorham immediately went before Judge Hancey and secured an injunction making Mr. Edgerton immune from arrest. Then Mr. Gorham

began his plan of making the other members of the Chicago Automobile Club co-complainants in the Edgerton case, at the expense of the club.

Mr. Gorham has been engaged in the latter phase of the business this week, getting the permission of the individual members to enter them as co-complainants. Mr. Browning says the ordinance injunction granted to Banker in last year was a "snap" affair, in which due notice was not given the city.

Fourteen cars took part in the first run of the season for the Chicago Automobile club, Saturday. The party left the club house soon after 2 o'clock and traveled to Riverside by way of Oak Park, and then to La Grange, where a short stop was made. The procession then proceeded over the A. A. A. route towards Joliet and returned, getting back late in the evening. The weather for the trip was the best this spring has yet produced and everybody was satisfied. A trip to the southward 10 days or so hence will probably be the next event on the club programme.

STRICT IN OMAHA

Omaha, Neb., April 16—At the city council meeting held Monday the automobile ordinance was taken up. It provides that owners must secure a license from the city clerk, and that the fee will be \$2. At the time the license is issued the owner must deposit a bond of \$100. A speed of 6 miles per hour is permitted in the city, from Iward to Leavenworth streets and from Twentieth street east to the river. Eight miles is the maximum speed at which motor vehicles may be driven in other sections of the city. Every motor car must be provided with a bell, gong or horn, which must be sounded at crossings, bridges and other dangerous points along a road or street. Cars must have a brake efficient enough to stop the vehicle within 10 feet when it is being driven at 8-mile speed. The front of the automobile must be equipped with one or more lamps, which must be lighted from dusk to dawn. A car must display a number in the rear; the number must be in white upon a black back and be 5 inches high. Two extra lights must be provided on the rear of the car; one red, which shall throw light directly behind, and the other white, which must shed its rays upon the number. Violation of the ordinance renders the offender liable to a fine of from \$5 to \$50.

SWELL PRIVATE GARAGE

Rome, N. Y., April 16—S. B. Stevens, a young millionaire of Rome, has added the sixth motor car to his garage. Stevens is the man who drove so cleverly at Ormond in his 60-horsepower Mercedes as to excite international interest. Mr. Stevens' new machine is a 20-horsepower Darracq landaulette, costing \$9,000, for the use of his mother. He now has two electrics, one a single seat and one a surrey; a Winton of 1903 pattern, a Gasmobile and the 60-horsepower Mercedes, and to this number he will shortly add a 20-horsepower Darracq chassis, which will be converted by him into a runabout. Mr. Stevens, as a part of his garage, conducts a private machine shop with tools of a value of over \$5,000 and he does all his own repair work and alterations. Later in the year he will add a racing car for use at Ormond, which will be the fastest that money can secure.

MERGER SURE TO CARRY

Indications Point to a Unanimous Vote on A. A. A.-A. M. L. Consolidation Scheme

New York, April 17—Formal notice has been sent out to the members by both the American Motor League and the American Automobile Association, asking for a mail vote on the proposition to amalgamate the two bodies in a new organization to be known as the American Motor Association. Secretary S. M. Butler, of the A. C. A., as secretary pro tempore of the A. A. A., cut the Gordian knot of the dilemma occasioned by the refusal of Secretary Gillette, through alleged conscientious and constitutional scruples, to carry out the directions of the A. A. A. directors in the matter, by seeing that the proper request accompanied by other plans of merger agreed upon was put in the mail. The members of both bodies must vote by April 30 or have their votes counted in the affirmative.

"Neither the constitution of the A. A. A. nor the A. M. L. has anything to do with the matter," said President Potter, of the A. M. L. "This is a new and independent movement, set on foot and approved of by the duly accredited representatives of both bodies. It is an amendment of the constitution of neither. We are joining in organizing a new body. The leaders of both associations and their members, too, are in favor of a new body being formed at once and resolved that no petty technicalities shall delay its accomplishment. So far as the A. M. L. is concerned, the replies that have been received are unanimous in favor of the merger. The A. C. A.'s action in unanimously indorsing the amalgamation indicates that the same view is being taken by the A. A. A. clubs."

"One of the first and chief things we will have to provide to make the new body a success," says Secretary Butler, of the Automobile club, who with President Potter, of the A. M. L.; Emerson Brooks, of the A. A. A., and another to be named by the A. L. M., will draw up the constitution and by-laws of the new American Motor Association, "is an efficient bureau of road information to furnish routes and maps to the members. Just as in the days of the L. A. W. will the A. M. A. members demand an actual return for their dues. You can form no idea of the extent of the demand for this sort of information. If the A. M. A. can supply it a big membership is assured on that basis alone. Each state division should have its own bureau of road information, sending out maps and routes to all its own members without request and ready by a system of exchange to furnish like data for any state asked. At the head of these bureaus should be competent enthusiasts of the type of Augustus Post, and the state engineers should be induced to become ex-officio members of the bureaus and keep them supplied with official road and survey data.

BOILER INSPECTORS VIGILANT

Minneapolis, Minn., April 18—"We never sleep; our mission on earth is to make trouble for the automobilist, and we hope we succeed in our humble endeavors." So would say the Minnesota boiler inspectors, if they were allowed to speak to automobilists. But as a rule the latter pass by with noses in the air and

without a sign of recognition. Some say the boiler inspectors, placed in office by the grace of Governor Van Sant, have caused that dignity more trouble in a given space of time than any of his other appointees. Certain it is that they are endeavoring to enforce the automobile law. When Inspector Johnson, of St. Paul, announced through the newspapers a few weeks ago that an owner of an automobile, who had taken out a license last year, need never bother about another, there was rejoicing over the prospect of being able to think no more of the inspector, and his penchant for placing the state seal on untaxed cars.

But now he comes out with a manifesto, proclaiming that there are over thirty automobiles which he is after; that he "has a little list" of those whom he before had missed. He has also discovered that dealers and some other people have a habit of shifting numbers from one car to another. Result—hereafter all numbers are to be screwed, bolted, soldered or padlocked to the car on which they belong.

To the consternation of Minneapolis motorists, Inspector Steele, of this city, bids fair to be a second Johnson. He has stated in no uncertain terms that he intends to enforce the law; and when a Minnesota official prepares to do that, it is wise to get from under.

The influx of new machines has been great this year, and there are undoubtedly scores of unlicensed cars in the two cities. The owners raised vigorous protests last year against the high-handed attitude which Inspector Johnson assumed, but it is doubtful if the inspectors will resort to the state seal to secure obedience to the law from those who have not yet complied with its terms.

RACES AT CHARTER OAK PARK

Hartford, Conn., April 17—Sanction is to be asked for an automobile race on the Charter Oak park track for Decoration day. Welch and Jones, owners of the track, have taken up the subject and will offer a program of much sport. Since this is the first automobile race to be run in Hartford, there is prospect of large attendance. The big class will have Eddie Bald, James Joyce and perhaps F. A. Law driving stripped big cars, with some other entries coming from the Locomobile factory. Another class will be for two-cylinder cars, and Engineers Maxim and Aldon will drive Columbias against Autocars driven by Fred Dart and Al Sisson. There will be a class of Pope-Hartford cars with test bodies, an Olds and a Knox class, as well as classes for steam cars and motor bicycles. No little interest is centering in the meet and it is expected that entries and attendance will be large.

Dr. Henry C. Bullock, whose name spells "horse" in the east, and who has owned some of the smartest harness horses to come down the grand circuit, has sold his entire horse outfit, live stock, carriages, sulkies and rub rags and bought an Autocar. For this action there is talk of expelling him from the Gentlemen's Driving Club, of which he has been trustee, and he is daily being called upon to defend his action. The doctor is versed with clean-cut epigrammatic speech and when he and Dr. Gardiner, a veterinary surgeon, met yesterday the fur flew.

Manager S. Z. Poli, of New York, New Haven, Hartford, Bridgeport and Waterbury, is perhaps the first theatrical impresario to make the rounds of his very many theaters in an automobile.

RHODE ISLAND LIBERAL

Satisfactory Automobile Bill Passed By the Legislature of the Little State During Last Hours

Providence, R. I., April 16—The feature above all others during the past week in automobile circles in this state was the passage April 13 of an automobile bill by the assembly. On the last day of the session the bill was crowded through and is generally satisfactory to automobilists. It is probably one of the most unique examples on record of a piece of automobile legislation, as it contains absolutely no mention of the matter of speed. It is simply an act providing for the registration of automobiles, although there is a clause which gives town councils the right to bar automobiles from certain roads provided these roads are not state highways or do not lead from town to town. The penalty is \$20 fine or imprisonment not exceeding 3 months.

The bill calls for the registration of automobiles with the secretary of state, the certificate to cost \$2, but every manufacturer or dealer may have assigned to him a distinguishing mark, which he shall display on all machines owned or controlled by him, and the certificate will cost the dealer or manufacturer \$10. Any automobile registered in another state may be operated in Rhode Island without extra charge. All machines must be locked when left standing and lights must be displayed after dark. All machines must be registered before June 1.

The passage of this bill, which was drawn up by one of the members of the Rhode Island Automobile Club, settles a question which has been much discussed here for 3 years. The Kane bill, which prescribed speed limits, and also called for licensing of operators, was so badly mangled by the house 2 weeks ago it was pigeon-holed by the senate committee, and at the last minute the bill was enacted.

For the first few days following the passage of the bill there was a great scramble among the automobilists of the state to get in applications for certificates, all of the applicants desiring to obtain some of the first numbers. Promises were made for the first seventeen by the secretary of state. This official today went to Boston to learn of the operation of the law in Massachusetts and to get ideas as to the proper questions to ask on the certificates.

ENTERTAINED MANY FRISCANS

San Jose, Cal., April 15—There was unusual activity last Saturday and everybody was on the qui vive for the automobilists from Frisco that were coming a hundred strong. It was the first run of the season of the automobile Club of California, and San Jose had been chosen among a score of other localities as the spot best suited to visit. Splendid weather favored the San Francisco motorists, who began to arrive during the latter hours of the afternoon, the last one reaching the Hotel Vendome at about 8:30 o'clock. Over a hundred were in the party at the hotel.

The visiting motorists went over the valley during the morning hours and started home in the afternoon. Many of Frisco's prominent people were among this touring party. Speaking about the future prospects for San Jose, Manager Brooks, of the Hotel Vendome, said:

"San Jose is anxious to become the automobile center of California. Only 2 hours, possibly a few minutes more, separates us from San Francisco, the roads around here are ideal, and there are no vexing speed ordinances, which make it impossible for the motorists to enjoy an outing. Accommodations are plentiful and the people will be glad to see the visiting tourists. At the hotel we had an automobile shed big enough for five machines. So many excursionists came that we had to decide at once to build an additional barn, which is now completed and can accommodate within its 80 by 20 feet about thirty big cars. A neat little circular is being printed showing the new garage and also giving general information concerning Santa Clara county. Within a short time a map of this county will be inserted, which will be of great help to the tourist. The supervisors of the county have expressed their willingness to co-operate in putting all the roads in first class shape. We are all going to work hard around here to make this an automobile paradise."

KENTUCKIANS HAVE A TRY-OUT

Louisville, Ky., April 18—The annual meeting of the Louisville Automobile Club, held Thursday, showed a gratifying and rapidly increasing interest in motoring affairs in the Kentucky metropolis. The meeting was preceded by a run down the new boulevard to Fountain Ferry park, 5 miles out on the Ohio river. A mild, sunshiny day following protracted April rains favored the club's plans and brought out a long string of cars filled with members and their families and friends.

To stimulate automobile interest, the local dealers had been asked to bring their new cars for inspection, a feature which proved a very happy thought, the automobilists being enabled to examine the late models and note comparatively their running qualities as they were put through their paces on the fine Fountain Ferry three-lap track.

A supper was served to the members of the club in the park cafe at 7 o'clock, following which those assembled went into executive session. Herman Nettleoth, Harrison Robertson, George H. Wilson, Biscoe Hindman and Dr. James B. Bullitt made pertinent and interesting speeches. Officers and committee reports demonstrated a wide scope of activity for the past year. That of the committee on legislation showed stout efforts for the attainment of fair state and city automobile laws. Its good work was manifested in its influence in the law just passed by the legislature permitting a speed of 15 miles per hour on the highways, and other reasonable privileges.

The report of the secretary showed an enrollment of fifty-four members, with prospects of a large increase in the near future.

Officers for the ensuing year were elected as follows: President, George H. Wilson; first vice-president, Biscoe Hindman; second vice-president, Dr. James B. Bullitt; secretary, Dr. W. C. Pfingst; treasurer, M. Robinson.

SOUTHERNERS IN A. A. A.

The Virginia East Coast Automobile Association, the Virginia Beach Automobile Association and the New Orleans Automobile Club were recently admitted to membership in the A. A. A. The Virginia East Coast Association is making preparation for a floral street parade of automobiles to take place Memorial day. It will be the first parade of the kind held in Norfolk, Va.

MANAGER SANGER DEAD

Promoter of All the New York Cycle and Automobile Shows Expires Suddenly on Monday

New York, April 19—The death of Frank W. Sanger, manager of Madison Square garden, which occurred yesterday, was a shock to automobile trade men and old-time cycle show exhibitors, all of whom had known him as a fixture in exhibition matters.

Mr. Sanger was sick only a few days, few even among his intimate friends knowing of his illness. A cold developed into pneumonia and on Monday afternoon the end came.

Mr. Sanger was born in Framingham, Mass., in 1849 and in early life was an actor—a very bad one, he always told his friends. He became manager of and interested in many great amusement enterprises, including the Grau Opera Co., the Metropolitan opera house, the Empire theatre and Madison Square garden.

Three years ago Mr. Sanger resigned the management of the Metropolitan opera house and the Madison Square garden, but the directors of the latter insisted upon him retaining his title and doing as much or as little as he liked. He was not under a regular salary, but each year the directors sent him a check, which, in his own words, "was always a very satisfactory one."

He took decided interest in the automobile shows and assumed more command over these events than any others held in the garden. Contrary to general opinion, he did not receive the profits from the automobile shows, these going to the garden company. Barring the one failure at the Grand Central Palace, Mr. Sanger has managed every cycle and automobile show ever held in New York city and the success of the events indicates his ability as a manager and business man.

Mr. Sanger was keen in business transactions and a companionable man. He leaves a widow and a son 19 years of age. The value of his estate is not given, but is known to have been large. Mr. Sanger's death will have no effect on the next automobile show, as arrangements for this have already been perfected.

KNOXVILLE MOTORISTS INCREASING

Knoxville, Tenn., April 18—There are now running in the city of Knoxville thirty-five automobiles. This is a small number considering that the city has over 32,000 inhabitants, but it fairly creditable considering that there were not over a dozen here a year ago.

By the end of the year there will be many more, for the present indications point toward a large business this year. Knoxville does little or no business with surrounding towns, but the two dealers expect to be kept busy handling the local trade. These dealers are the Schultz-Howard Co., selling the Cadillac, and Rogers & Co., handling the Olds. The former company has recently spent \$5,000 improving its building and equipment and now has a garage which compares favorably with any in the south.

Unfortunately for Knoxville, the roads leading out of the city are, as a rule, far from good and the demand here will undoubtedly be for light machines, which will be used about the city. In fact, the only large car in the city is a two-cylinder Toledo. The fight for good roads has been begun by the automobilists in this section and it is expected that they will have great influence in improving the roads.

An automobile club is now being organized in Knoxville. A preliminary meeting has been held and a committee is now working on a constitution and by-laws.

Last year a few races were held here, but they amounted to but little and no interest seems to be taken in that branch of the sport. Much more interest is shown in touring, in spite of the roads, and there is now a Cadillac headed toward the city, which has been out carrying a party of people through Georgia and Alabama, since the first of January.

BOOST FOR HOME INDUSTRY

San Francisco, Cal., April 16—It does not happen very often that the owner of an automobile which has cost more than \$10,000 disposes of it and buys a motor car which is valued at possibly less than half the former quotation. This happened, however, last week when ex-Governor James Budd bought a White touring car and disposed of his 16-horsepower Mors vehicle which had cost him between \$15,000 and \$18,000. A good boost for home industry. The French machine will be added to the ranks of "for rent" vehicles.

Leavitt & Bill, the bicycle jobbers, have taken the agency for the Knox. The National Automobile Co. handled the car before, and has only the Franklin and Toledo at present, the Autocar being in the hands of the West Coast Motor Car Co. and the Rambler being sold by Fred A. Jacobs.

There is a rumor going around that Gus Boyer will soon be the agent for the Toledo, and have northern California to work in. The local agent for the Cadillac, Cuyler Lee, reports some good business the last few days, and other dealers are also in a good humor concerning the way business is going.

SHOWS MARVELOUS GROWTH

A French automobile and bicycle tire manufacturing concern advised its customers recently that when it started in business in 1899 the factory occupied 13,200 square feet of ground. At the end of 1901 the enlarged factory occupied 24,200 square feet of space; at the end of 1902 the additional buildings covered 41,800 square feet, while at the end of last year the space had been increased to 237,050 square feet. The output of tires during those years was as follows: In 1899, 48,850; in 1900, 65,420; in 1901, 91,836; in 1902, 131,119; in 1903, 150,293. During 1900 the concern added forty-seven men to its force, during 1901 sixty-two, during 1902 seventy-nine, in 1903 ninety-one and this year 170. In 1900 the concern had a shop engine developing 10 horsepower; it was taken out in 1901 and a 15-horsepower motor put in its place. The following year a 35-horsepower machine was put out, and last year one of 136 horsepower. Last January this was replaced by an engine of 500 horsepower.

LATE PITTSBURG SHOW

Pittsburg, Pa., April 18—Pittsburg is to have an automobile show. It will be at an unusual time, the second week of May, but its promoters think this will not be too late to make it a profitable venture. The exhibition will be held May 14 to 21, inclusive, and will be made up of automobiles, motor boats, motor cycles and motor accessories of all kinds. The place of holding will be the Pittsburg exposition building, which is a permanent exposition structure centrally located. Space will be sold for 50 cents a square foot.

STRONG ON GOOD ROADS

Delegates From Many Southern States Assemble at New Orleans and Exhibit Enthusiasm

New Orleans, La., April 16—The most important good roads convention ever held in the south ended its two days' session last week amid much enthusiasm and the belief that splendid results will be the reward for the promoters of the convention, the 200 delegates who came from five different states, the people from the large and small cities and towns, and especially for the farmers.

Progressive Union hall, at 311 Baronne street, was selected as the meeting place less than 24 hours before the opening exercise of the great convention. It was chosen because Tulane hall was considered too small to hold the several hundred delegates and other invited guests and officials. They came from all over Louisiana, Mississippi, Tennessee, Alabama and Texas as official delegates, and from many other states as invited hosts.

Shortly after 10:30 o'clock in the morning M. J. Sanders of the Progressive Union called the convention to order. Governor W. W. Heard then addressed the convention, welcoming it in the name of the people of the state of Louisiana and dwelling at length upon the object of this great gathering of road friends. Amid loud cheers W. H. Moore, president of the National Good Roads Association, followed the governor in the speech making. He urged that good road organizations be formed all over the different states and then to go after the congressmen and senators who will very likely pay much more attention to requests made by organizations than by individual demand. "What they want is your vote. Now, tell them that they must support the cause of good roads; that they must take the matter to congress and make a national matter of it. The Panama canal is going to do this city and this country a great deal of good, but the good it will do will be as nothing compared with what good roads would accomplish, for the matter of good roads affects every person in the country." President Moore also suggested that the white and black convicts be used in the refraction and building of the roads.

The other speakers of the day were: John Dymond, president Louisiana Good Roads Association; Lieutenant-Governor Albert Estopinal; John C. Claire, industrial agent for the Illinois Central railroad; M. Eastman of Calcasieu parish, and others.

At next day's session of the convention Colonel J. B. Killebrew, ex-commissioner immigration and agriculture of Tennessee, was the principal speaker.

President Stuyvesant Fish of the Illinois Central railroad spoke briefly in the afternoon, while the other speakers of the closing days of the convention were: Dr. Alderman, president of Tulane university; M.A. Hays, land and industrial commissioner of the Southern railway; Senator James Clinton, of Natchez, Miss.; Secretary R. W. Richardson of the National Good Roads Association; Colonel A. S. Mann, a Florida road builder and one of the vice presidents of the national organization. Resolutions were then adopted and the convention ended with the forming of a state organization, of which John Dymond was elected president, Henry Mayo secretary and Theodore Grune-

wald treasurer; committees will be chosen later.

Thirty-five of the prominent delegates were invited by the automobile club for a run around town and over the roads in the vicinity. As the weather was fine it proved a pleasant affair.

There was much individual talk during these two days of convention and the most interesting matter discussed was certainly the project of building a 20-mile speedway for automobiles.

OHIO HAS HALF LAWS

Cleveland, Ohio, April 18—The Ohio senate has passed the Overturf automobile bill and it is now half a law. Whether it will survive a contest in the house is a question. A short time ago the house passed the Bassett automobile bill, which was conceded by operators and manufacturers to be an excellent measure. It has been hung up in the senate, however, and now each branch of the general assembly has made half a bill of its own. The result may be a conference committee on the subject of automobile regulations, or it may be that both sides will be stubborn and both bills may die a natural death.

One of the curious provisions of the Overturf bill is that when the automobilist passes any domestic animal which shows signs of restiveness or fright, he (the chauffeur) shall at once shut off the exhaust from his engine and "shall speak in mild and assuring words to such animal being managed."

The bill does not specify what "mild and assuring words" shall be whispered into the ears of skittish colts to convince them that the passing of a puffing automobile is really no occasion for coyly shying to the roadside or running away.

The automobile speed limit is fixed at 8 miles per hour in cities and 15 miles on country roads.

Whoever operates his automobile on any highway in the state shall have displayed conspicuously thereon in letters and figures not less than three inches high, the name of the county in which such automobile is recorded and the record number. The county recorder shall keep the records and issue licenses to automobilists.

PASS THE RACING GAME

Mr. Morgan, a member of the Automobile Club of Great Britain and Ireland, recently expressed the wish that in future the club pay less attention to road races of the Gordon Bennett type, because, "although very useful in the earlier stages of the automobile industry they appear to many of us to have passed their period of usefulness." S. F. Edge, the English racing man, answering Mr. Morgan's argument, said he also thought the utility of such races dying, but at the same time the club is doing well in assisting British manufacturers to recapture the trophy. "Personally, I would rather spend my time otherwise than in preparing for and competing for any Gordon Bennett race," writes Edge. "But as a manufacturer I had to recognize its influence, and the two largest contracts I ever received for Napier cars, one from America and one from France, were absolutely the direct result of winning the Gordon Bennett race. I admit that it seems curious why one should have orders for touring cars because a racer wins the race, but it is a fact, and one that has been recognized by club officials, but at the same time I now think that touring competitions and competitions to bring out the good points of the car for the average user are of the greatest importance and desirability."

MANY CALIFORNIA DEALERS

City of Los Angeles Simply Bubbling Over With Automobile Establishments, Yet the Majority of Them Seem To Bear Evidences of Immense Prosperity

Los Angeles, Cal., April 15—New firms are getting into business here with startling frequency. Los Angeles has been the best city in the country the past year for selling automobiles and people are anxious to get in on the ground floor, evidently. Thirty thousand dollars was the profit one automobile house is reported to have made here last year. Then there were others who report sayeth lost money.

The newest local house is the Western Motor Car Co., with the state agency for the Thomas and southern California agency for the Northern and Toledo cars. The temporary store is at 730 South Spring street, and the manager is Earle Anthony. The company is a close corporation with \$100,000 cash capital. The five directors are Earle Anthony, his father and mother, and Mr. and Mrs. R. P. Hillman. Charles E. Anthony, the father, is president and Mr. Hillman secretary and treasurer. The latter has for some time been paying teller in one of the local banks. Young Mr. Anthony owned a Locomobile some years ago, but has had no practical experience in the automobile business. A car load of Northern runabouts has been received and a Thomas demonstrator is on the way here. The Western Motor Car Co. intended to adopt the name of the California Motor Car Co. but found a previous corporation of that name located in this state. The name Pacific Motor Car Co. met with the same fate.

As there is a Western Garage in this city and a West Coast Motor Car Co. eastern correspondents should not get the three names mixed. The Pacific Motor Car Co. is located in San Francisco and there is a Western Automobile Co. in San Francisco. Mail service from coast postoffices is very bad, so these similar names will bother some.

A. P. Worthington, of Cleveland, O., who established a coast agency for the Stearns in this city a few weeks ago, has now opened a storage and repair garage in connection with the Stearns agency at 120 to 126 East Ninth street, only a half block off Main street. The building was built for an automobile garage and well lighted, with all modern conveniences. The Stearns is becoming favorably known and several cars have already been sold.

The repair shops have had some shaking up of late. E. R. Ridsen, the bicycle man now owns the Olive & West establishment at 651 South Broadway and Harry Olive is back with Norman W. Church, the Stevens-Duryea and Cadillac agent. Guy West is for the present with Ridsen. The name has been changed to the Western Garage and the north half of the building has been given up and is now the California agency of the Haynes-Apperson, the street address being 649 South Broadway and J. A. Rosesteel is the agent.

The Swalm Automobile Station has been combined with the Nevada livery stable, a half block farther south on Broadway, and W. E. Swalm has retired to take up his other business, that requires all his time. Charles Bogen-schneider, of 919 S. Main street, has retired from the automobile business and rented his place for a furniture emporium.

Mills & Chick, of 651 San Pedro street, still

find their repair shop growing and have twice enlarged. They have built two automobiles to order and rebuilt a number, but have given up building motor bicycles.

Alfred C. Stewart has found his repair work so popular that 16 of the best workmen obtainable are kept busy. There are few automobile repair shops anywhere so well equipped. Mr. Stewart is building automobiles to order and has lately patented a novel spark plug. Frank A. Garbutt, the local amateur, who scored so many victories last year with White steam cars, is having a gasoline racing car built at Stewart's that will cut quite a figure in coast racing this season and may be seen in the east. The car will be long, low and similar in appearance to the Winton Bullet No. 2. Garbutt's car will weigh about 1,900 pounds and is built for road use as well as track.

The Roadrunner Automobile & Power Co. is the name of a new corporation in this city which is to build both runabouts and touring cars that will bear the name of "The Roadrunner." S. P. Smoot, one of the incorporators, has been building the Roadrunner bicycle for several years. The other directors are F. A. Stephenson, C. W. Raymond, B. S. Shaw, and John Albright.

The Shepherd Automobile Engine Co. factory will hereafter only build gasoline delivery wagons, not having time to turn out runabouts. About fifty delivery wagons have been ordered and the Brennan motor will be used.

The Automobile Vehicle Co. is busy these days assembling 1904 cars. It is behind on orders and it will be another month before it catches up. The 1904 models are handsome. Most of the parts are made in the factory. The only part of the cars ordered from the east are the wheels, tires, coils and axles.

W. C. Schroder has secured space adjoining the Automobile Delivery Co. garage on East Ninth street, to show the Dumont. He will sell the Dumont at \$2,000, paying the freight and not making the usual \$150 addition to the list price other California dealers do for freight.

The West Coast Motor Car Co., which succeeded to the business of Heinemann & Pratt, closed last August by a receiver, has lately taken the agency for the Columbia. None of

the big Columbias has been sold in southern California as yet, although a demonstrating car has been here for months.

The double cylinder Rambler touring car has made a great hit already and nearly twenty have already been delivered in this and adjoining towns by W. K. Cowan, the southern California agent. At Long Beach, one of the coast towns, four have already been purchased.

The Los Angeles Automobile Co. has at last begun to sell automobiles. This concern has been in business about a year and has had a trial of the Knox, Northern, Elmore, General, Peerless, Buckmobile and Duryea in addition to the Ford, with which it is now doing well.

A. P. Fleming, secretary of the Automobile Club of southern California, had taken the agency for the General, but was not selling any and he resigned the agency to the Stamms, who sold about a half dozen before the General factory went under.

N. W. Church has been at home in his new garage for several months now. Church seems to be doing better with the Stevens-Duryea than any other of his numerous agencies. He has not had a Packard in stock for many months and for a big car has the Peerless. Church has sold several of the 1904 Knox double cylinder touring cars and one Knox delivery wagon.

Norman Church made a splendid record with the St. Louis runabout last year, but somehow Woodill & Hulse Electric Mfg. Co. captured the agency last fall.

The branch house of the Goodrich people has had a big business in tires since it opened early this year and the Diamond Rubber Co. will probably be the next tire maker to open a branch here. Vice-President Miller was in town the first of the month looking up the situation with Donald McKay, the Diamond traveler in this territory.

Vice-President Parker, of the Hartford Rubber Works, was in this city late last month on a flying trip and was shown over southern California by H. O. Harrison, of the Williams Rubber Co. Mr. Harrison was until last year the Hartford traveler in the coast territory.

The Williams Rubber Co. is now located at 635 South Main street, but growth of business has made it necessary for it to have a building built which it hopes to occupy inside of 60 days. For several years W. G. William had a store at 528 South Broadway, but his business of repairing tires grew so that it was decided to incorporate and take in new blood. Now there are two Williams and two Harrisons, a pair of brothers, and nearly a score of other workers and bicycle tire work is almost forgotten in the great amount of automobile tire work, hose manufacture, etc.

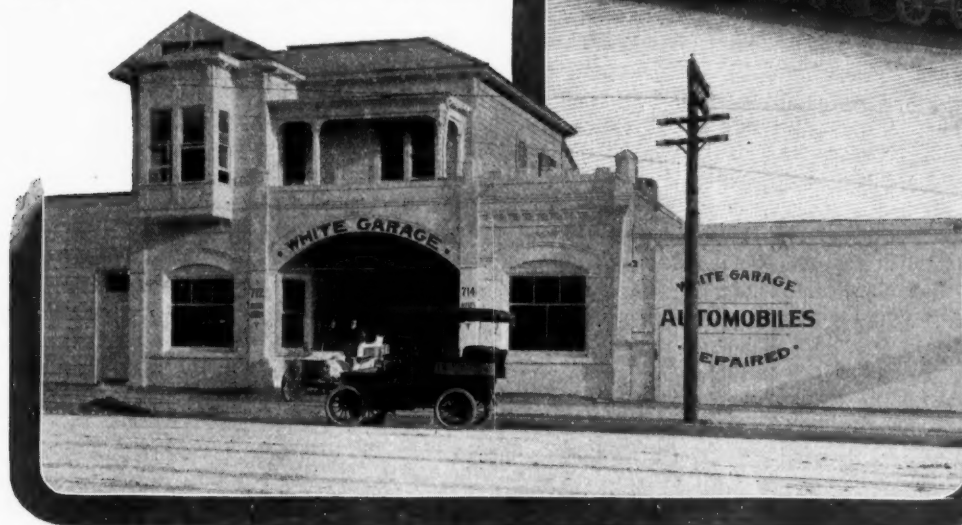
The White garage, although strange as it may seem, is about the whitest thing in California, for it is white outside and white inside, and many of the automobiles are white all over, too. The menage is made up of Capt. H. D. Ryus, who is the manager, and his carefully chosen staff. Manager Ryus was formerly captain in the United States army and also quite a success as a football captain. He is from the Kansas university and has chosen another Kansas university man, Robert Atkinson, for his general assistant. The demonstrator is Sam Thies, who has sold Whites all over California and Autocars and Knox gasoline cars all over southern California. Before the automobile game began Sam Thies was in the machinery and steam engine business and, besides being a perfect driver and a good salesman, he is a master mechanic. The



MOTOR AGE THE PACIFIC AS SEEN BY LOS ANGELES MOONLIGHT MOTORISTS

renting department is in charge of George M. Adair, formerly of San Francisco. "Robin" Adair has several assistants, as many who visit southern California will not ride in anything but White cars. It was Adair who, when brought before a local judge for scorching, claimed that it was justifiable, for he was carrying Mrs. George Gould to the Santa Fe depot to catch her private car and the time was limited. The judge said Adair was right and so he cut off half the fine.

The White garage repair department is in charge of Andrew P. Wetteraur, a master me-



MOTOR AGE

THE WHITE GARAGE AT LOS ANGELES, CAL.

chanic, who was formerly in charge of the White agency here. The staff at the White garage has not been idle since the new establishment was opened early in January. Actual count shows over 30 White touring cars have gone out to customers in less than 90 days, and at this writing the sales are averaging nearly one car a day.

CATCHING UP ON WORK

Hartford, Conn., April 17—The all-night gang in the factory of the Electric Vehicle Co. has been let go. The best workmen of the night shift have been added to the day force and some of the day men have been dispensed with, though some of the members of the night staff have been given work in the assembling department. Superintendent Joyce found that the product of the night force was disproportionate with day work, while shop expense was almost double. The force is now working until 10 at night, and some work has been given to outside concerns. The product of the Electric Vehicle Co. is coming fast. A dozen of the big cars will be delivered this week and a flock of them is in the paint shop. It was most pleasing to the engineers of the company that the first motor of the four-cylinder type to go into this year's car showed 40 horsepower though rated 30-35.

The new Mark LX electric runabouts are being delivered in numbers. The Hartford boat carried two on their way to Tien-Tsin, China. The cars have been ordered by an English firm doing business in the Orient. The same steamer took H. W. Alden and the light gasoline two-cylinder Columbia to New York, from which port Mr. Alden drove the car to Philadelphia.

It will be pleasing to friends of Eddie Bald to know that he is keeping everlastingly at it, and that he gives promise of making good as a driver. Bald has been at the shop of the Electric Vehicle Co. learning the game since the Chicago show. He has now been added to

the testers of cars and is doing good work. A great frame and other details of a racing car have been ordered and work will soon begin on a speed car for Bald to drive on the track.

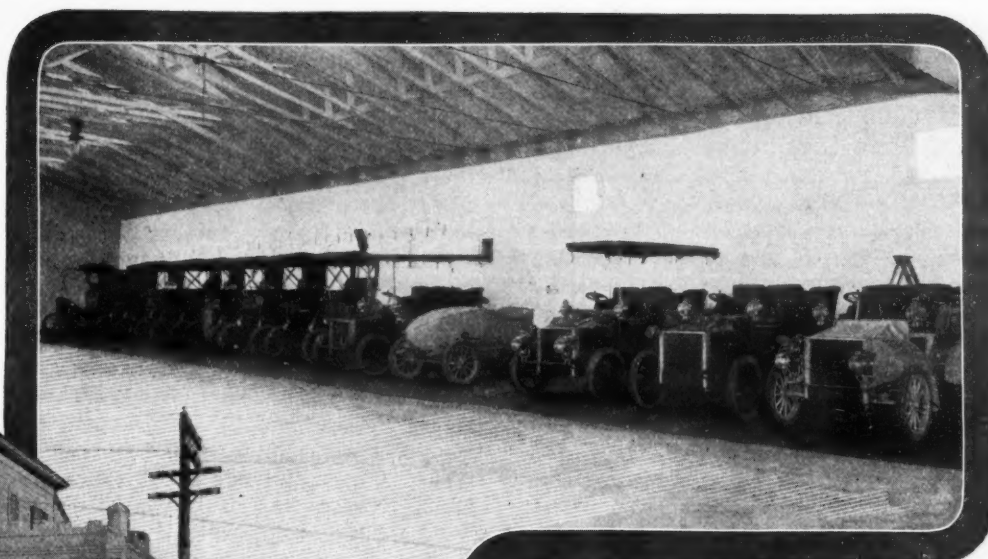
Automobiles formed one of the principal features of the Mardi Gras parade incident to the opening of the military, merchants and manufacturers' carnival Saturday evening. All sorts of vehicles were in line, with passengers attired in the most grotesque fashion.

Fred C. Billings, of the Billings & Spencer Co., maker of drop forgings used by many automobile manufacturers, and Engineer Johnson, who designed the old Toledo steam car, have a model of a new gasoline two-cylinder car which promises success. The car is now being given tests.

The big four-cylinder air-cooled motor, the product of Jones, who claims the development of the Knox waterless, and which has been built in the factory of the American Hardware Co. in New Britain, has been given road trials and appears to be a demon. Jones claims to have struck it with the best cooling device brought out. The car is being thoroughly tested. Several other models are also being worked out in the Russell & Erwin factory of the hardware trust.

RAILROAD AUTOMOBILE TRIED

Boston, April 16—The first real practical test to be given the Oldsmobile railroad inspection car in the east was that experienced by Roadmaster Haskell, of the Boston & Albany road. The car was delivered recently and immediately submitted to a most severe test, F. H. Peabody handling the throttle. This car was the one displayed in the recent Boston show, and which there attracted attention. The trial trip was from Pittsfield to the New York state line, a distance of 20 miles. On this trip the car worked to perfection, gliding along the rail without a hitch or a skip and operating the block system of signals and the spring switches,



a surprise to the roadmaster, and also furnished rear protection to the car. After this trip the car was tried out on the steepest grade on the road, that from Pittsfield to Hinsdale, on which stretch it is necessary to use two locomotives on all trains. Here the car proved itself all that could be desired, and as a result of these two trips Mr. Haskell expressed himself as well satisfied with the work accomplished. The car is geared to 40 miles an hour and with the four passengers carried on this trip it repeatedly traveled miles in 2:15 on the level and 2:35 on the incline, with Roadmaster Haskell at the throttle, this being his first experience with a motor vehicle. Mr. Peabody says the sensation of driving the car along the rails is most peculiar, and especially to one accustomed to driving a vehicle.

Mr. Haskell is confident that by the use of this car he can transact his daily work in less than half the time now used, owing to the delays in train connections.

GOOD BUSINESS IN PROVIDENCE

Providence, R. I., April 18—The Thomas & Lowe Machinery Co., of this city, has had considerable success in selling the Autocar, for which it has an agency over an extensive territory. Up to the present time it has disposed of twenty-three orders, and all but six of the cars have been delivered. A. S. Hitchcock, who last year was the local representative for Shattuck & Co., who had automobile stores in Lowell, Boston and Providence, but who are now out of business, is attending to the sale of Autocars for the machinery company, and in spite of the fact that he has no garage or salesroom he has received almost as many orders up to the present time as he did for the entire season last year. The Thomas & Lowe company has as territory in which to work all of the state of Rhode Island and the biggest parts of Plymouth, Bristol and Barnstable counties in Massachusetts.

The local agents succeeded in connecting with the factories this week much to their own advantage. For some time a large number of orders have been in for machines, but they have not come and the eager amateurs have been clamoring at the garages for their machines. Six Autocars arrived from New York by steamer; six Wintons are in after a long journey; three Franklins are also on the list of new arrivals; five Knox machines came in also, two Stanleys, three Cadillacs and two Waverley electrics.

LATIMER BILL REPORTED

Senate Committee Will Unanimously Recommend Its Passage at the Next Session of Congress

Washington, D. C., April 18—As a result of the splendid fight made by the good roads advocates during the present session of congress the senate committee on agriculture at its last meeting decided by a vote of six to one to report favorably the Latimer good roads bill early in the next session of congress. This is a decided victory for the good roads propaganda and presages national aid in the near future in the building of good roads. Those voting in favor of the bill were Senators Foster and Quay, republicans, and Bate, Money, Simmons and Latimer, democrats. Against the bill was Senator Proctor, chairman of the committee.

Inability to agree upon a report prior to this time was due to a difference of opinion among senators as to the proper amount of money to be made available to each state under the proposed law. An agreement was made whereby it was decided to amend the pending bill by fixing at \$100,000 the minimum appropriation which each state shall first receive and then share in the balance of the appropriation in proportion to its population. Provision was made, however, that no city shall be credited with more than 10,000 population. The purpose of this is to limit the appropriation for states having large cities. This provision is to offset the effect the population of great cities would have in determining the amounts to be received by a state. The bill is intended to aid in the development of country roads, of course, and the limit placed upon the calculation of city population is expected to simplify the enforcement of the law.

Another important amendment to the pending bill is the elimination of the word "territory" wherever it occurred after the word "state" in the bill, thereby excluding all territories from any participation in the benefits of the act.

The good roads cause having achieved its first victory, it now remains for the advocates of the cause to redouble their efforts during the months intervening between the next session of congress to keep alive the interest now manifested in the pending bills to the end that the matter receive favorable action when the time comes to vote on the proposition.

TO WIND UP CENTURY COMPANY

Syracuse, N. Y., April 18—Harold Stone, son of Referee in Bankruptcy Charles L. Stone, has been named trustee in bankruptcy of the Century Motor Vehicle Co. and his bond fixed at \$10,000. The liabilities amount to about \$70,000 and the assets about \$40,000. The principal creditors are the stockholders, who indorsed the company's notes. Other claims are: E. C. Stearns & Co., of this city, \$921.65; Syracuse Supply Co., \$3,108.56; Aeme Steel & Malleable Iron Works, of Buffalo, N. Y., \$1,237.19; American Ball Bearing Co., of Cleveland, O., \$3,833.40; E. D. Clapp Mfg. Co., of Auburn, N. Y., \$1,462.74; Garvin Machine Co., of New York, \$1,400; Hartford Rubber Works Co., of Hartford, Conn., \$713.67; T. P. Hopewell & Co., of Newark,

N. J., \$854.99; Niles-Bemont-Pond Co., of New York, \$1,123; Potter & Johnson, of Pawtucket, R. I., \$2,503.50; J. H. Williams & Co., of Brooklyn, N. Y., \$1,692.63; and several hundred claims from \$1 to \$400. Those interested in the company are assisting in closing up its affairs and expect soon to have all the assets disposed of and a dividend declared. The property of the company will be sold by Trustee Stone at the plant in East Water street at 10 o'clock Saturday morning, April 30.

The Syracuse Raw Hide Mfg. Co., which makes gears, is now occupying the fifth floor of the new factory building of the Syracuse Casket Co. on South Clinton street. Both companies are controlled by the same men and already the former finds itself cramped for room. New quarters will be sought soon, and in the fall a new factory may be put up. The tanning is now being done near Fayetteville, but this summer a tannery building 50 by 100 feet will be erected near the city line. The tanning is done entirely by chemicals. In addition to gearings the company makes bushings, pinions and rawhide novelties, not only for the automobile trade but for many other lines which use such goods.

WEATHER BAD IN BUFFALO

Buffalo, N. Y., April 18—It was estimated last fall by the trade people that in the neighborhood of 400 new cars would be sold in Buffalo this season, but it now looks as if the number is considerably underestimated, as orders have already been placed for 250 cars. There has been no sign of spring weather and 8 inches of snow fell Friday evening. While these conditions are deplored by the majority of trade people, it is a matter of rejoicing for the automobile trade people, as almost without exception the Buffalo agents are unable to get deliveries, and the climatic conditions will help them out considerably.

J. A. Cramer has opened his new garage and half of it has been rented to the Bison Motor Co., which is handling the Pope-Toledo.

The George N. Pierce Co.'s new garage, which is to be located on Main street, will cost about \$75,000.

The Star Automobile Co., 176 Ellicott street, is the latest addition to the Buffalo automobile trade. It is incorporated for \$10,000, with the following officers: Daniel B. Driscoll, president; Daniel Burgmaster, vice president; Elmer E. Chambers, secretary-treasurer. It is the intention to make a car for 1905, but no effort will be made to put a car of its own make on the market this season. It has, however, secured the western New York agency for the Cameron car and in addition to pushing the sale of this car in this section it is the intention to also run a garage.

The annual meeting of the directors of the E. R. Thomas Motor Co. took place last week and the following officers were elected for the ensuing year: President, E. R. Thomas; vice-president, E. L. Thomas; secretary-treasurer, J. M. Edsall. Cal Paxon is traveling in California in the interests of the Thomas three-cylinder car and is said to be doing a satisfactory business.

Harry Baird has severed his connection with the Lackawanna Motor Co. and is now building two 70-horsepower racing cars, one of which, when completed, it is said will be driven by Albert Champion.

SHOW COMMITTEES MEET

Motor Car and Parts Men Hold Session in New York To Consider the Allotments of Space

New York, April 15—A conference was held today at N. A. A. M. headquarters, at which the N. A. A. M. show committee and a special committee named at a meeting of the parts and accessories makers held last night met and discussed the representation of the latter at the shows. The conferees were M. J. Budlong, Charles Clifton, Windsor T. White and General Manager Miles, on behalf of the N. A. A. M., and D. J. Post, Veeder Manufacturing Co.; Howard T. Raymond, B. F. Goodrich Co.; Mr. Apple, Dayton Electric Co.; Fred Castle, Twentieth Century Mfg. Co., and Harry Dunn, Fisk Rubber Co., representing the makers of tires and accessories.

It was decided that it would be wise for the latter to complete their proposed organization, to incorporate and to have a standing conference committee with power to confer with the N. A. A. M. The N. A. A. M. committee agreed to recommend the use of the Madison Square garden concert hall and the extension, of the balcony 8 feet and to recommend also that approximately 10,000 square feet set aside for the exhibits of the parts and accessories makers at the show, which should embrace the concert hall and enough of the balcony to make up the 10,000 square feet in all.

It was suggested by General Manager Miles that the parts and accessories makers appoint a member to represent them on the committee on space allotment. This met with approval, both sides agreeing to recommend it to their respective bodies.

The suggestion was also made that it might be well for the parts and accessories makers to withdraw from the N. A. A. M. to avoid double representation, providing the withdrawal was universal.

Today the N. A. A. M. committee on incorporation also held a meeting. The result was that the final incorporation will be concluded at a general meeting of the association to be held on May 4.

BIG BUSINESS IN NEWARK

Newark, N. J., April 18—A third garage is to be constructed by the H. J. Koehler Sporting Goods Co., of Newark, at Montclair, N. J. This company has a Newark garage at Willow street and Bloomfield avenue and another at Essex street and Railroad avenue, opposite the depot, in Orange. With the Montclair garage the company's business will assume enormous proportions. At each of the three garages, in addition to the storage of cars, repairs will be made and the entire line of cars handled by the company will be shown. The Montclair garage will be modern in every way and is to be ready by June 15. Forty machines will be accommodated. The Orange garage accommodates fifty and the Newark garage is large enough for the forty cars stored, a total of 130 automobiles to be cared for daily. The Orange garage is under the management of Russell Gillman. The company handles the Rambler, Ford and Mitchell cars. A shipment of Fords is expected May 1, as is also the case with Ramblers. A Mitchell car is expected daily. The Rambler, Ford and Mitchell cars are handled for Essex, Union, Morris and Pas-

sale counties, and good business is predicted.

George Paddock, of the Auto Vehicle Co., says in regard to the outlook for the season: "There won't be one car supplied this year where four will be wanted. People have been waiting for the experimental age of the automobile to pass and now that automobiles have been demonstrated to be entirely fit, these people stand ready to buy. There is a greater demand in Newark for machines costing under \$1,000 than can be met. I have a car load of Olds coming any day now, and every one is sold. I have doubled my order for this year over last and only wish I had doubled my early order of this year. As the weather settles and we see spring, conditions are going to grow worse."

Seven styles of automobiles of the Knox pattern are handled by the Auto Shop Co., of 228 Halsey street, varying in price from \$1,200 to \$2,300. Any style of an automobile desired may be found in this line.

G. W. Condon, of 283 and 285 Halsey street, will shortly open a garage and repair station on West Fifty-eighth street, New York city.

Automobiles are not fool proof, but really give little trouble to the purchaser who uses an average amount of horse sense. Dr. Johnson secured an Oldsmobile in 1902. Mr. Cole, of the Auto Vehicle Co., says Dr. Johnson was never seen at the garage until the next season, when he made an exchange for a 1903 pattern. His only trouble had been a loosened wire from the spark plug. Dr. Johnson has ordered a 1904 and believes he will have as little trouble as with his former machines.

BIG SYRACUSE GARAGE

Syracuse, N. Y., April 18—The R. M. Cornwell Co.'s five-story building will probably be the headquarters of tourists during the summer season. On the ground floor is the retail salesroom for electrical and automobile supplies, on the floor above is the show room and retail salesroom, while the third and fourth floors are used for storage purposes and the fifth floor is the repair department. Each floor is 90x120 feet and the building is equipped with an elevator capable of lifting the largest automobile constructed, and there are entrances from two streets. Mr. Cornwell says that trade is active and that he is disposing of about two carloads of Oldsmobiles a month. The business in accessories and supplies he says is also good.

CARBURETER TEST

The Automobile Club of France has arranged a competition for carbureters, which will begin May 16 and bear upon the following two points: Mechanical power under different speeds and consumption, per kilowatt-hour under different speeds. The carbureters will be divided into the three following classes: First, those established through a special motor; second, those established to use a special fuel, and, third, those made to be used upon any kind of motor with any kind of fuel. There is an entrance fee of \$30 per carbureter and medals will be the rewards.

NEARLY 5,000 IN LONDON

Between February 17 and March 23 the highway clerk of London issued 297 motor car licenses and 411 for motor bicycles. Up to the last named date 2,653 cars and 1,769 motor cycles had been granted licenses in the British metropolis.

CHICAGO TRADE IS DULL

Backward Spring Assigned the Cause —Motor Trucks Popular With Many of the Big Houses

Chicago, April 19—The backward spring is causing a long and universal howl down Wabash avenue and in the automobile colony at Michigan avenue and Fourteenth street. Cold weather has prevailed almost without interruption and sales have fallen far behind the record set last year at this time. The stringency of the money market or the trouble with the United States Steel Corporation are not held responsible, but just the weather. Even when the sun shines the chief result is dust. All this has prevented spring fever and a desire for rapid transit in motor cars. But when the winter does conclude to retreat, then, according to the dealers, the game will open up with a rush. People who have ordered cars will make demands for sudden deliveries and people who have not ordered cars will be sorry they had not done so long ago.

These conditions are not peculiar to Chicago, but are wide spread, every section being affected. This is held to be Chicago's second big year in automobiles, and the local market is more troubled by the weather conditions than is the case in New York, where automobilism is older.

Dan Canary is preparing to present to the public the best-equipped garage in the west and the building selected offers unique facilities. The old panorama building on the southeast corner of Wabash avenue and Hubbard court has been disemboweled. A cinder floor is being laid and by May 1 the place will be ready for the occupancy by the Canary agency, which is now located in the Ludington building. Quarters will be provided for chauffeurs and waiting rooms for women, in addition to the business quarters. The chauffeurs' room will be equipped with lockers, shower baths, a library, writing tables and the like. Chauffeurs will be restricted to these quarters when off duty and will not be allowed in the offices or display rooms. The display rooms are to be handsomely decorated. Mr. Canary calculates that the changes contemplated will give him the largest garage in the west and that there will be room for nearly 200 cars, twice as many as the agency can handle now. There will be a finely-equipped repair shop, the same to be open all night from May 1 until the season closes in the fall. This will be an innovation in Chicago. The Canary agency will keep an automobile livery of seven high grade cars, Winton and Peerless, which will be at the service of the public at any hour of the day or night.

According to a Wabash avenue dealer, the advent of the automobile truck for heavy hauling is close at hand. The example set by the Schoenhofen Brewing Co. and Montgomery Ward & Co. is already being followed. Revell's heavy delivery wagons for furniture are in line, and more are to follow. It is added that now that the big firms have shown that the truck is really more profitable than horse handling the firms that do heavy work will get together and demand of the city that they be given better paved streets. Better paved streets should be followed by more motor trucks. It was reported that the Schoenhofen Brewing Co. had ordered ten more trucks, in addition to the two already in use. Inquiry at the Schoenhofen

office, however, failed to verify this. The Studebaker Automobile Co. is preparing to deliver automobile trucks to carry burdens of from 1,000 to 10,000 pounds.

It is estimated that there will be nearly three times as many charging stations for electric vehicles in Chicago this year as there were last season. The Chicago Edison Co. is equipping its electric light stations with the charging apparatus and other companies and individuals have taken up the work as well. There were not over a dozen places in the city last year where electric vehicles could charge their batteries, but for 1904 it is calculated that there will be from thirty to thirty-five.

According to W. L. Hibbard, of the Studebaker Automobile Co., the moderate-priced motor car is what will be chiefly purchased in the near future. He said last week that the high priced and high powered cars are all right and have their legitimate uses, but the medium-priced article is what a majority of the people want. In this connection the Studebaker company is pushing a car in which the number sixteen plays a curiously important part, the weight being 1,600 pounds, the cost \$1,600 and the motors rate at 16 horsepower.

Erwin Greer, of the Greer Motor Car Co., reports a busy season. Eleven Couriers have been sold thus far, and the trade in second-hand machines has proven excellent. Four of last year's vehicles were disposed of last week and there was a market at that time for more than twice as many.

The average physician who buys an automobile buys a light one, at a light cost. A long-headed north side doctor, however, has bought one of the high power and high speed machines and says it pays in the long run, even counting in the \$125 a month for a chauffeur. The medicine man can get home to lunch and more than that, his sphere of influence is increased greatly.

The Studebaker Automobile Co. is expecting the first of its new victorias by the first of June. The vehicles will be equipped with the new Edison battery, which is practically an unknown quantity in Chicago, although the Woods Motor Vehicle Co. uses the Edison in its inside-operated brougham.

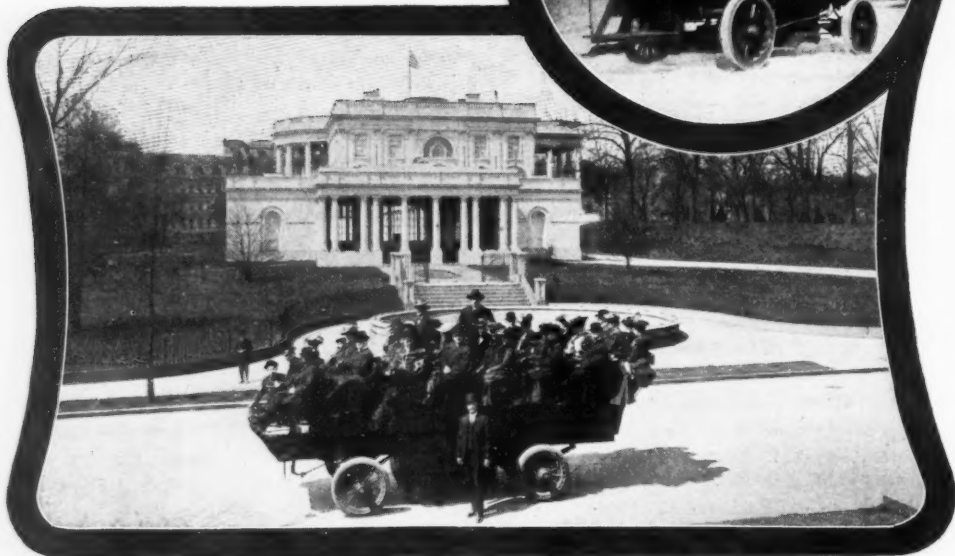
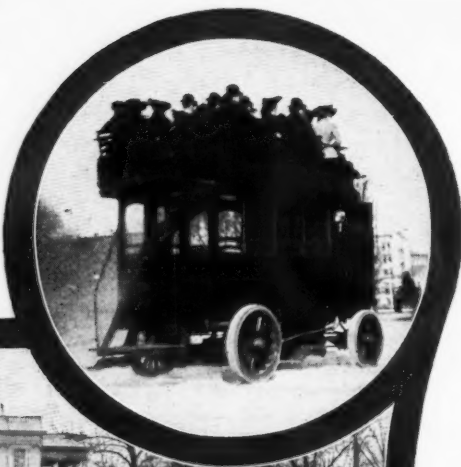
"We expect that our new two-story, 171 by 30, building, at 1504 Michigan avenue, will be completed by June 15," said a member of the Automobile Exchange, which was incorporated last week. "We have the agency for the Rodgers air-cooled car and for the Michigan runabout and have a large second-hand trade. Our new building will be fitted with modern machinery and we intend to engage strongly in the repair and charging business. A spacious garage will be provided and we believe that when we are completely fixed we will have one of the best automobile stores in town."

FILLING CADILLAC ORDERS

The Cadillac Automobile Co., of Detroit, Mich., immediately after the disastrous fire of last Wednesday, when the major portion of the new factory was burned, as reported in the last issue of MOTOR AGE, explained its position in the matter of filling orders in a circular letter to agents, parts of which are as follows:

As you know, we have had a fire, a bad one, but not bad enough to put us out of business. Our engine factory and machine and power plant are in full operation. Our warehouse, 300 by 180 feet, with large quantities of material, including 2,000 engines and 200 finished model A cars, is undamaged. This warehouse will be converted

into an assembly shop within a week. A two-story factory near the plant of one of our body makers has a large force of finishers at work on bodies. We have sufficient material coming in to make nearly forty machines per day. The large manufacturers who supplied us with bodies, axles, tires, wheels, frames, chains and other material have been instructed to duplicate orders already filled. We have lost no tools, dies, jigs, patterns, drawings or special machinery. Our entire force of 600 employees are now at work. Within 30 days we will be shipping model B cars. In the meantime we can fill a limited quantity of orders for model



MOTOR AGE

SEEING WASHINGTON IN AUTOMOBILES

A cars. If you cannot hold your trade until we can get machines to you, do not hesitate to save your profit by selling another machine, if you can get it, but remember that we are likely under present conditions to be able to fill your order as soon as any other concern which makes goods of our class. We can make no definite promises at this date. If you cannot wait, please cancel your unfilled orders and we will assign them to those who can. We can see no reason why we cannot resume model B shipments in a month. We cannot, of course, fill all our orders in 30 days, but we can begin. Please canvass your trade at once and let us know how many standard machines of each model you will need to fill your orders, and we will try to give you some idea of what we can do. The contract for rebuilding the burned portion of our plant has been let and work begun.

SCOTTISH BRAKE TRIALS

Tests were made recently, in Glasgow, Scotland, with a 10-horsepower car for the purpose of finding out the distance the car would travel after the brakes had been applied. There were seven trials, in three of which two brakes were used. In these tests the distance traveled was 13.66 yards at a speed of 15 miles; 13.88 yards at a speed of 19.6 miles and 13.55 yards at a speed of 20 miles. With only one brake applied, a distance of 14.21 yards; 10.88 yards and 17.88 yards were covered in three trials, the cars going at 20 miles an hour. In the seventh test, the vehicle, being driven at 21½ miles per hour, was stopped after a run of 10.91 yards. The road upon which the test was made was level and in good condition.

GASOLINE WON THE DAY

Washington, D. C., April 18—The long pending case of Weston vs. District of Columbia has at last been decided by the Court of Appeals in favor of Weston. Frederick deB. Weston, of the Automobile Storage & Repair Co., was convicted in the police court upon an information charging him with storing and keeping gasoline for sale, without license, and was allowed a writ of error. In another case between the same parties, recently decided, the court upheld the

validity of the particular regulation under which this conviction was had. It only remained, therefore, to consider whether the evidence in the present case was sufficient to support the conviction.

Evidence was adduced tending to show that Weston was licensed to conduct a general automobile storage and repair business at 1319 L street, northwest; that the building had been especially constructed for the purpose, and in so far as its construction was concerned, is perfectly adapted for the purpose for which it was built. It was also shown that although Weston had applied for a special license required for the storage and sale of gasoline on said premises, yet such license had been refused and he was without the special permit required by the police regulations. The court said: "The business carried on by Weston, for which he had a license, was the storage and repair of automobiles. This necessarily included the vehicles under the necessary conditions of their ordinary use. One of these conditions was that an automobile would, after being called out, used, and returned for safe keeping and attention until wanted again, with some gasoline in its tank which was suffered to remain. In our opinion, to store gasoline upon one's premises, within the meaning of the regulation, requires something more than this. For these reasons the judgment will be reversed with costs."

A dispatch was received here this week from Cleveland to the effect that Harry Owsney, of Cook & Owsney, local agents for the Winton, White, Stevens-Duryea and Orient buckboard, had been selected to fill the position with the Winton Motor Carriage Co., lately occupied by Barney Oldfield. A MOTOR AGE man saw Mr. Cook in reference to this dispatch and was informed that Mr. Owsney was now in Cleveland and that nothing definite could be said about the matter. Mr. Owsney has been more or less identified with the Winton interests for the last 4 years. He has quite a reputation as

an amateur driver and in the event that he enters the professional field he will undoubtedly make good. It is understood that he will retain his Washington interests even if he enters the racing field.

W. J. Foss, manager of the local branch of the Pope Mfg. Co., has been to Hagerstown, Md., to inspect the Pope plant there and within the week will go to Toledo to hurry up a number of Pope-Toledo shipments.

SEEING THE CAPITAL

Washington, the capital city of the nation, stands today one of the handsomest and most interesting cities in the world. Its broad and beautiful vistas, magnificent public buildings and many points of historic interest make it the mecca of sightseers. In view of this fact, and for the purpose of facilitating sightseeing, two companies have been organized to cater to the needs of the thousands who weekly visit Washington. They have established automobile trips to all the points of interest, which afford an ideal way of seeing the city of magnificent distances. A more enjoyable and more thoroughly satisfactory way of seeing the capital city cannot be imagined. The Auto-Transit Co. is operating an electric coach made by the Electric Vehicle Co. and the National Coach & Observation Co. operates a Fischer bus. Each makes three trips of 50 miles a day and usually is well patronized.

ELECTION IN MAINE

Forty members of the Maine Automobile Club, of Portland, Me., met at the annual meeting, held April 13, in Portland. The following officers were elected for the current year: President, Henry M. Jones; vice president, Henry R. Stickney; treasurer, George E. Sawyer; secretary, Howard Winslow; executive committee, H. A. Harmon, M. D. Hanson, C. H. Simonds and P. C. Kilborn; membership committee, F. A. Chaplin, T. M. Spear, Jr., and L. C. Gilson; finance committee, Colonel F. N. Dow, T. J. Foster and C. H. Simonds; auditing committee, S. S. Boyden, A. E. Poole and F. N. Smith; run committee, M. D. Hanson, C. H. Simonds and H. A. Harmon. During the past season fifty-three new active members were admitted and 199 associate members.

RECENT INCORPORATIONS

Chicago—The Automobile Exchange, capital, \$8,000. To manufacture and deal in automobiles and other vehicles. Incorporators, J. H. Holmes, M. Holmes, Otto B. Schmid and B. Schmid.

Chicago—Pullman Autocar Co., capital, \$15,000. To manufacture automobiles. Incorporators, J. S. Meckling, A. O. Erickson and P. H. Keenan.

New York—The Colonial Automobile Co., capital, \$5,000. Directors, J. Dukes Wooster, L. Reed Fuller, C. C. White.

BADGERS ORGANIZE

Automobilists of Racine, Wis., met last week and organized an automobile club. T. M. Kearney was elected president, H. G. Mitchell vice president and F. J. Miller secretary and treasurer. The selection of a suitable name for the club and by-laws will be made by a committee formed of H. J. Rogers, William M. Lewis, T. M. Kearney and F. J. Miller. There were eighteen motorists present at the meeting.

METROPOLITAN GARAGE GOSSIP

The White Sewing Machine Co. has established a branch in the Oranges in charge of Benjamin F. Adams. It is located at 19 Railroad place, Brick church.

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The Cadillac Co., of New York, has received a telegram from William Metzger, saying that the fire will not delay shipments to the New York agency more than 30 days.

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Horace B. Day, local agent for the Queen, recently climbed Eagle Rock in one of the two-cylinder 10 horsepower touring cars of this make, and carrying, besides himself, five other passengers, the total weight being 1,020 pounds. The climb was made in less than 7 minutes.

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M. L. Downs, who was official weigher and superintendent of transportation in the Pittsburgh endurance run, has been added to the selling staff of the Brooklyn Automobile Co., agent for the Haynes cars in the metropolitan district. Recent prominent purchasers of these cars are C. H. Evans, Hudson, N. Y., the ale brewer, and Albert E. Tracy, of Chatham, N. Y., a well known stock breeder.

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Woolston & Brew are beginning to make deliveries of the Thomas three-cylinder touring cars. Prominent among recent buyers of them, are Charles R. Otis and Percy S. Palmer. Prompt deliveries of Stevens-Duryea runabouts, whose agency the firm also has, are being made. Franklin W. Hopkins, of Hopkins & Hopkins, is a recent purchaser. Both the makes were among the entries at the Boston hill climb.

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A new company made up of the head men in the Worthington Automobile Co., has purchased all the rights and property of the Berg Automobile Co. The business will continue to be conducted as the Berg Automobile Co. The 24-horsepower car will be sold as the Berg, with the Reinier Co. as selling agent. The Worthington Automobile Co., 547 Fifth avenue, will sell the 18-horsepower Berg under the name of the Meteor. The headquarters of the new company will be at the latter address. The company is now erecting a garage at 141 to 151 West Forty-ninth street, running through

to Fiftieth street, at a cost of \$450,000. The officers of the Worthington Automobile Co. are Charles C. Worthington, president; W. J. P. Moore, vice president and general manager; H. Rossiter Worthington, secretary and treasurer.

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Hollander & Tangeman sold six Fiats last week, four of 24-30 horsepower, and two of 16-20 horsepower. Prominent among the buyers of them were Clifford V. Brokaw, of New York; George W. C. Drexel, of Philadelphia, and Dr. C. T. Parker, of Boston. Several shipments of 1904 models are expected shortly. Among these will be two 60-horsepower racers to be driven by Fogelin and Lancia, both drivers in the international cup race. One of these was entered for the hill climb at Boston on Tuesday, but it will not arrive before May 5, as the attention of the Turin factory has been engrossed touring out the trio of international cup cars.

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Manager Davis, of the Knox Automobile Co.'s agency, says that following the success of the three Knox wagons in the service test, four merchants visited the garage and made inquiries with a view to purchase. The Adams Express Co.'s New York branch has now had a Knox in its daily service for three weeks. To give adequate carrying capacity it is fitted with a body back of the driver's seat, measuring 8 by 4 feet. Two single-cylinder Knox tonneaus, carrying five or six passengers, are now running between Westchester and Clason Point inn. They make fifteen round trips a day, covering 60 miles each. The cost has been 1.43 cents per mile so far.

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It is expected that the Pope Mfg. Co.'s general sales headquarters and garage, which is to be erected at the corner of Broadway and Fifty-fifth street, will be completed early in the autumn. The showroom will have a two-story frontage of plate glass for 78 feet on Broadway. The building will be four stories high. The first floor will be taken up with a salesroom and the office. On the second floor will be a ladies' waiting room, while on the third floor will be quarters for chauffeurs. The top floor will be equipped as a repair shop,

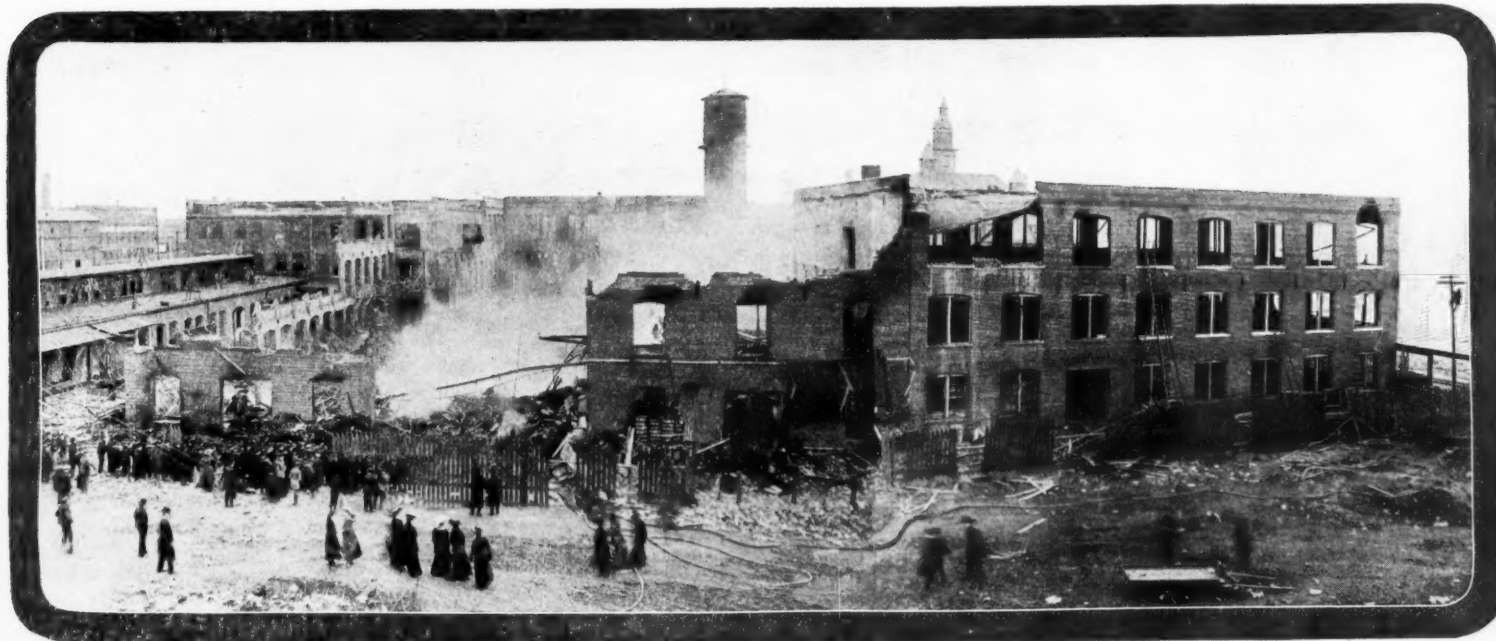
with skylights, pits for the machines and ball-bearing turntables for quick handling of automobiles. Every modern improvement will be incorporated with a view of making it the handsomest automobile home in the country. No machines will enter on the Broadway side, there being an entrance on Fifty-fifth street for that purpose.

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The Daimler Mfg. Co., of Steinway, L. I., which has had for several months a sales headquarters on East Twenty-seventh street, near Madison Square garden, will shortly move into a larger garage. The company is now devoting its chief attention to pleasure vehicles. They are of 30 horsepower, four-cylinder Mercedes type, made from drawings furnished by the German factory. An original feature, though, is a semi-flexible frame, which C. M. Bouggy, the sales manager of the company, claims does away with the danger of twisting the crank and gear boxes. It consists of a rigid inner frame, which carries the engine and transmission gear, except the differential. An outer frame carries the differential and body. All inequality in the road is absorbed in the flexible outer frame.

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The alteration of the five-story building, at 1 West Thirty-fourth street, opposite the Waldorf-Astoria, into a garage for the use of the American de Dietrich Motor Car Co., American agent for de Dietrich & Co., of Paris and Luneville, France, has been completed. It has a rear wing extending through to Thirty-fifth street, which will be used as a repair shop. The company has a capital of \$100,000, said to be American backing. R. E. Jurrige, who promoted the company, is treasurer and general manager, Albert Lemaitre is president and consulting engineer. Several limousines, landaulets and King of the Belgian tonneaus of 20 and 30 horsepower are ready for delivery though the company will also import 40 and 80 horsepower cars. Baron F. Turkheim has gone to St. Louis to take charge of the de Dietrich exhibit. Manager Jarrige says that Gabriel will come over after the international cup race to drive a 120 horsepower car in the Vanderbilt contest.



MOTOR BICYCLES UNDER DISCUSSION

Interest is growing in the weekly discussions of the Chicago Motor Cycle Club, and as a result the club is gaining recruits. A short time ago Mr. Levedahl, president of the Aurora Automatic Machinery Co., addressed the club. Later on there was a discussion on organizing to establish stations in cycle shops all over the touring district in and about Chicago, so that there will be centers for catching up or controls.

Mr. Levedahl had left Aurora, Ill., during an afternoon, making the run to Chicago in 3 hours over very heavy and muddy roads. He used a regular Thor-parts motor cycle. The first 11 miles were ridden in three-quarters of an hour. The roads then began to get muddy. After riding about 15 miles the engine began to miss. He put in another plug, but this did not cure the trouble. He later on examined the carbureter and found what had happened to him only once before in a long motor cycle experience all over this country. The mud had gathered on the carbureter and held down the priming pin so the engine got too much gasoline. This may occur to any carbureter having a priming pin.

Arriving at Lyons—about 12 miles from Chicago—he stopped again and found the gasoline tank empty. The priming pin had allowed the gasoline to run out. Securing another supply he started again and then his tire punctured. The road was rough and Mr. Levedahl, weighing over 200 pounds, the pedals gave out. His method of riding is to stand on the pedals.

Mr. Levedahl led with a discussion of carbureters. He had had little experience with any other than the Thor, although he had ridden other machines. It was his opinion that unless one was an expert, the carbureter would better be left alone, for it often did not need the adjusting that the novice usually imagined. The novice turns to the carbureter when he finds anything wrong. The cause usually is with the electrical system. Mr. Levedahl said when he first got a machine he was advised repeatedly not to touch the carbureter. He could not quite believe this at first, but he later found it was true and that the troubles were elsewhere.

Mr. Levedahl gave it as his opinion that any motor cycle that a respectable dealer would handle to-day was all right. Some machines may, of course, do more than others, but the trouble that comes should not be laid to the machines. He thought that very often the rider was to blame—in fact, mostly so. A cylinder would never cut if it were even reasonably oiled—a piston could even run fairly dry without injury; but before it could reach the state that would seriously damage it, it would stick up many times. Thus the operation of expansion would save the careless operator from damaging his machine. It is, therefore, automatically fool-proof; and many times when the piston sticks, the rider ought to congratulate himself. But cylinders do cut, and this is evidence that great abuse has been done the



machine at some time by the owner or others.

Mr. Levedahl exhibited a cylinder that had been cast in the usual mould of the Thor and dwelt upon the construction and difficulties. He said to produce a good gray-iron casting, free from defect, was not an easy thing. In fact, of all cylinders cast only about 40 per cent were good and the rest had to be thrown out. The fault was with the foundrymen. In the years leading up to the present, common gray-iron castings were not made to perform the fine functions of a gasoline motor, where the inside had to be polished and be so perfectly air tight; and therefore the art had not reached a point where success was easy. A cast iron cylinder is a perfectly satisfactory article when cast right. A great deal, however, depends upon the kind of iron used.

As to radiation, Mr. Levedahl said a surface coated with black lead would radiate 50 per cent more heat than a bright surface. His cylinders were made 1¾-horsepower, but in the brake test they developed 2. Sometimes they developed 2½ and up to 2¾. But the engine is designed to stand 1¾ and it will run indefinitely under that load. For a while it will stand for 2-horsepower and a little over, but after a time it might heat. This accounts for cases where riders complain of engines slowing down after running a few hours. It is not supposed an engine calculated for a certain load can be worked above that load for an extended period without showing the effect. But this effect even then is not serious—it would simply overheat and slow down, and with the slowing would gradually cool and return to its normal work. Poor handling of the gas and compression could also cause this—over gassed and over compressed for work requiring less power. All this the skilled driver soon learns, and when he does he finds his engine always ready and always working.

As to expansion from over heating, Mr. Levedahl found one engine in California where the cylinder had expanded slightly oval, thus decreasing the compression, with loss of power. This cylinder had not, of course, been annealed. A cylinder that has been annealed will not thus expand. The front of an engine gets more air than the rear and has been carefully noted for effect. He had noticed on a steel cylinder—which shows effect of overheating quicker than iron—the inside showed a blue mark following and immediately behind the rods clamping the cylinder to the crank case. As to the position of the engine in the frame, it had been argued that when placed in front, with the head inclined forward, it would get the air first and freely. But Mr. Levedahl said that, when in the middle of the frame and as part of the frame taking the place of the seat mast, it got plenty of air, as nothing is in front of it. But there were engines mounted behind the mast and behind the spark coil, that possibly might feel the effect of thus being shielded from the direct air current. An engine should

be so placed that the air can get all around the ribs. He had found out also that by boring holes through the ribs, the radiation was considerably increased. This is somewhat of a paradox, for thereby the surface is burned, but practice had demonstrated this to be fact.

As to the efficacy of iron ribs against copper, he agreed that copper was a better metal for throwing off heat. That is, it would draw heat away from iron, but it was a better retainer of heat than iron. Weight for weight, the copper would draw heat away from iron and then keep it; but if the copper ribs were much lighter, thus making more radiating surface, it might be that they would be efficacious in cooling the cylinder. But it must be remembered that copper is used for soldering for the reason that it holds heat so long.

Overheating of an engine also caused another and common cause of stopping or misfiring, in that the spring holding the inlet valve would lose its tension. This spring has to operate with wonderful quickness and it therefore has to be up to its maximum tension to perform its function well. There had been some thought given to this subject and the putting of the inlet spring outside the dome was seriously considered. Ribbing the dome as it now is constructed would not accomplish the result.

This brought the question as to which was preferable—the automatic or the mechanically operated intake? Mr. Levedahl thought the automatic right according to present practice as applied to the Thor engine. Many pointers had been gotten from the old country and a representative over there reported that the mechanically operated intake had been abandoned on some motor cycle engines.

As to spark plugs, Mr. Levedahl thought they are all pretty much alike in general practice. He was experimenting on a new plug that was constructed with particular reference to the extreme expansion and contraction, and so far it was a decided improvement. A sample plug was exhibited showing how the porcelain was held rigidly tight under all conditions, and breakage of the porcelain reduced fully 90 per cent.

Jerking of the machine under low speed was referred to, and to overcome it throttling was recommended, using the new handlebar throttle; and the retarding of the spark so that compression would be low. Skill in operation could overcome all this jerking.

Piston rings would get in line according to Captain Koeppe's experience, but Mr. Levedahl's experience was that it seemed to make no difference.

Pressure in the cylinder, Mr. Levedahl said, was theoretically about 105 pounds at the highest compression point, but leakages in the valves really brought this down to 90 pounds in practical operation.

The club has already adopted a neat uniform and when out on runs the members are to always wear this. The first run of the season was held last Sunday.



Motor Car Family Trees

No 5 -
The Thomas

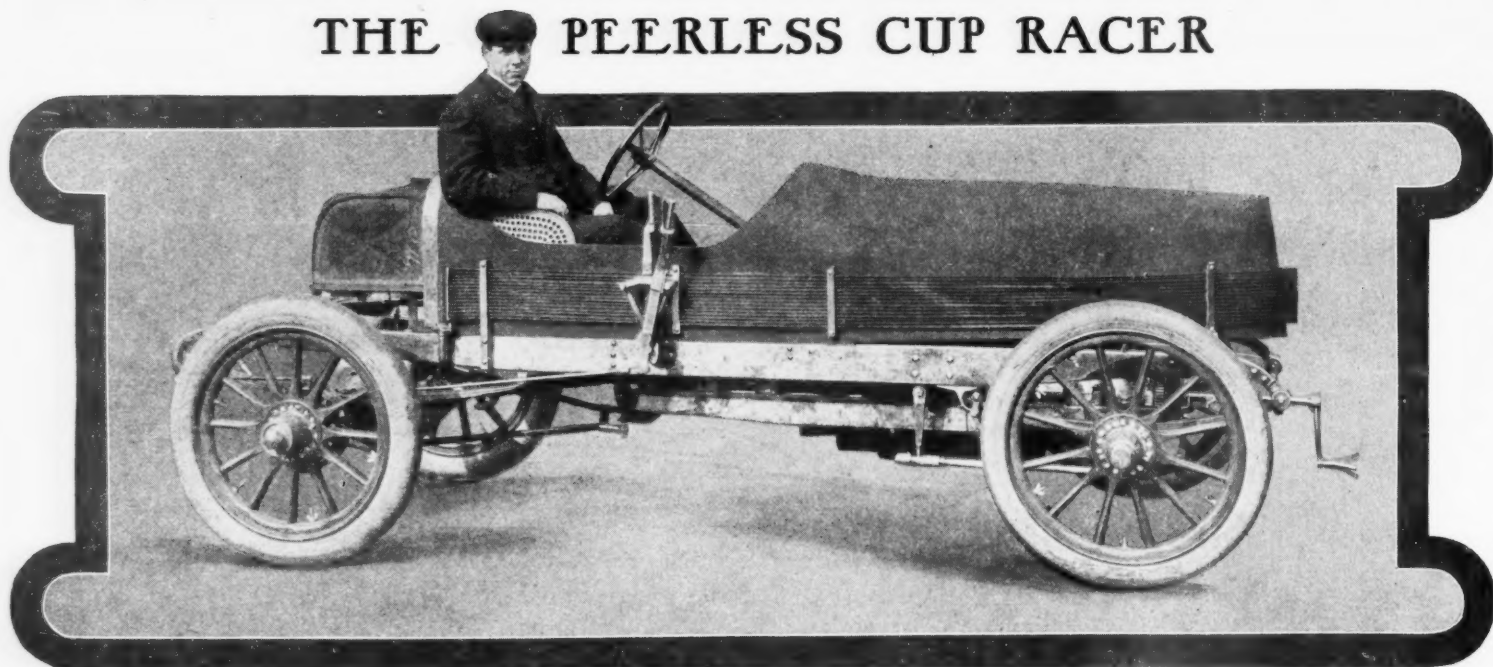


Model 18—1903
The Flyer—1904
Motorette—1901

Model 17—1902
Model 7—1902

The Thomasine—1904
Auto-Quad—1901
Auto-Tri—1901

THE PEERLESS CUP RACER



MOTOR AGE

LOUIS P. MOOERS ON THE NEW PEERLESS RACER

Cleveland, O., April 19—The racing car built by the Peerless Motor Car Co., of Cleveland, O., to compete in the American trials for the Gordon Bennett international cup race bears a close resemblance to the racer of last year after it had been remodeled for the winter speed trials on the Ormond beach. However, the new car is considerably lighter and is less powerful than the old. Louis P. Mooers, who designed the car, is unwilling to state the exact horsepower of the new machine or to give the dimensions of the cylinders, but it is understood on good authority that the car will develop between 40 and 50 horsepower; whereas the older car is supposed to have been of 80 horsepower.

The new car hangs considerably lower than the old and slopes down in front, this being caused largely by the fact that it has 34-inch wheels with 3½-inch tires in front, and 36-inch wheels with 4½-inch tires in the rear. The wheel base is 8 feet 8 inches, and the tread 4 feet 6 inches. The main frame is of pressed steel, 5 inches wide at the widest point. The mechanism rests on a sub-frame, which is also of pressed steel and which extends from the front to about the center of the car, being supported by arched trusses.

The four cylinders are cast in pairs, as in the standard 35-horsepower touring car. The spark plugs are in the center of the heads. But one carbureter is used, and the mixture is slightly heated by warmth taken through a tube leading from the exhaust pipe. The mixture and spark advance are controlled by levers on the steering wheel, the connecting rods passing through the steering mast. There are four mechanical speeds forward and a reverse drive.

A directly geared pump provides the water circulation and radiation is effected through sixteen 5-16-inch copper tubes which extend from the front of the car to points even with the water tank back of the seat. No flanges are used on the radiation tubes. The remodeled car last year had this system of radiation but there

were numerous flanges to increase the surface. It has been found that back of each flange there was a dead spot which held the heat, and it is believed that the bare tubes, affording a clear sweep of the air, will furnish better radiation than the other system. Mr. Mooers had the car out on the road several days last week and he expressed himself as more than pleased with its showing. It will be finished in red, like last year's car.

STANDARD TOURING CAR

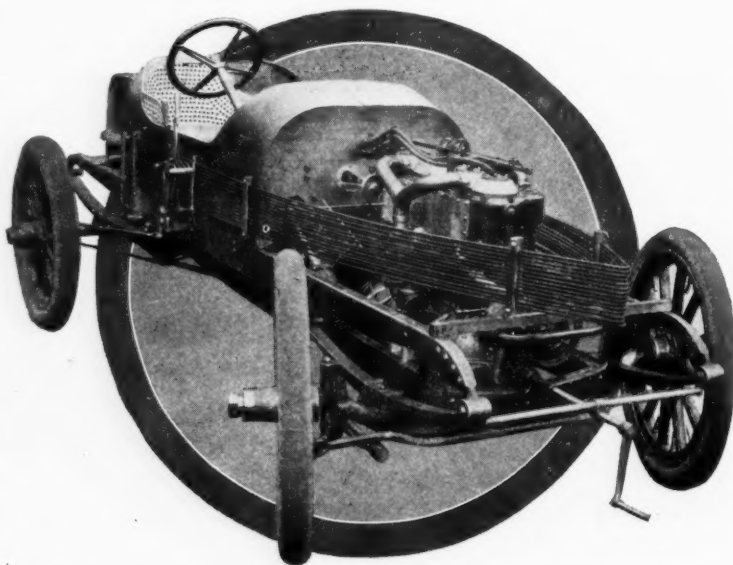
The four-cylinder touring car made by the Standard Motor Construction Co., of Jersey City, N. J., is chiefly characterized by its marine pattern of upright motor. This engine is similar to that placed on the racing boat Standard last summer, although it has only four cylinders, instead of six, and is not provided with the self starting and reversing means of the boat motor, which consisted of a compressed air tank and a shifting cam shaft.

The cylinders, which are of 4-inch bore by 5½-inch stroke, are cast in pairs, and the two pairs are bolted together so as to form, in appearance, single casting. The cylinders are mounted upon light stanchions or posts, the lower ends of which are attached to the skeleton frame supporting the crank shaft bear-

ings, and the motor thus has the general appearance of a marine steam engine. The frame is stiffened by cross braces. A vertical governor shaft at the forward end of the motor is driven from the crank shaft through helical gears, and the horizontal cam shaft at the left-hand side of the cylinders is operated from this vertical shaft through another pair of helical gears. On this cam shaft are mounted all the cams for operating the inlet valves, exhaust valves and the make-and-break igniters. The crank shaft has three bearings, one at each end and one in the center. The cylinder heads are cast integral with the cylinders. Access may be had to any of the valves by simply removing two nuts. The current for the make-and-break ignition is furnished by a Standard magneto, which is operated from the crank shaft by a pair of spiral gears. The engine is said to develop 25 horsepower at 1,000 revolutions per minute.

The carbureter, which is of the float feed style, has a peculiar arrangement of regulation to suit varying engine speed. There is only one air inlet, but the opening around the spraying nozzle is increased and decreased in size according to the pressure of the air, this being accomplished by a spring-actuated trap door resting over the nozzle. When there is no suction this door nearly rests on the nozzle, but the suction lifts it against the force of the spring, thus enlarging the opening, and the greater the rush of air the wider the opening. The spring tension is adjustable, which affords means of adjusting the mixture.

The two mechanically operated inlet valves in each pair of cylinders are connected by a port common to both, and a main pipe branching into a Y connects with a port in each of the two cylinder castings. The ball governor on the vertical shaft acts on the throttle of the vaporizer to regulate the speed of the engine. The exhaust ports connect by manifolds with easy curves to a single pipe, which leads to a cylindrical muffler placed in the rear.



MOTOR AGE

SHOWING THE PEERLESS MOTOR

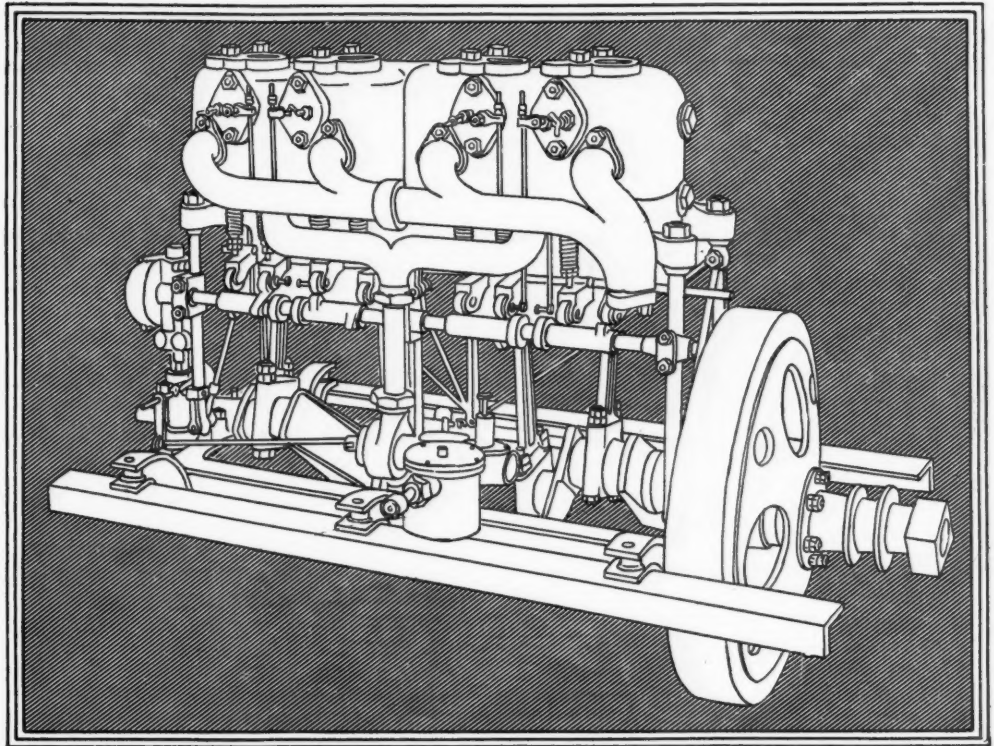
The friction clutch is of the conical type, the cone being an aluminum casting faced with leather. The connection between the clutch and the sliding gear is made by a joint which allows free longitudinal and lateral motions. The speed change gear is of the sliding gear style, giving three forward speeds and a reverse and direct drive on the high gear. It is contained in an aluminum case with hand hole in the top. The gear is interlocked with the friction clutch by means of a pin dropping into holes in the shifting rod, so it is impossible to operate the clutch until the gears are in perfect mesh. A pair of spring shoes fastened to the under frame serve to retard the clutch when it is thrown out.

To the final drive shaft outside the gear case is keyed a brake drum, which is gripped by a leather faced steel band. This drum also serves as one of the yokes of the universal joint of the propeller shaft. The universal joint is used only at the forward end of the propeller shaft, and a rocking sliding joint at the rear end, the connected shafts being in a substantially straight line when the car is normally loaded, the engine being tilted or "canted," as is usual in boat construction, to bring the crank shaft in line with the bevel pinion shaft.

The cardan joint is of a style in which there are no pins. The cross enters the sockets loosely and is then bushed by hardened steel cap bushings, which are screwed into the yokes and locked, the yoke being undercut inside. When the bushings are in place a pocket is formed at the end which contains enough oil to lubricate the bearings for a long time. The rear axle is a typical bevel gear construction, the bevel gear being secured to the differential gear on the rear axle and the whole enclosed in a casing on the axle.

The cooling water is circulated by a gear pump, which is directly connected to a downward extension of the vertical governor shaft. A Mercedes style cellular radiator with hexagonal tubes is used, and air is forced through this radiator by a fan mounted on ball bearings and driven by a helical spring running over grooved pulleys. This device is said not to be affected by moisture and to retain the same tension constantly.

Oiling is accomplished by a belt driven oiler mounted upon the dash. This oiler comprises a long rocking beam, having attached at each



MOTOR AGE

THE STANDARD MOTOR

end a row of cups which dip into the tank and are then slowly raised until the beam is nearly vertical; the cups then spill their contents into a set of hoppers, which are piped to the different parts requiring lubrication, the cups on one end of the beam emptying into a different set of hoppers than those on the other end. The oiler is operated by two sets of worm wheels, giving a double reduction, so that the complete cycle of operations is only repeated about once a minute. The capacity of the cup is, of course, very small.

Plain bearings are used throughout, except on the fan shaft and the thrust bearing for the clutch. The front axle is $1\frac{1}{2}$ inches square. The wheels are of wood and are shod with 34 by 4-inch Goodrich tires. The springs are all semi-elliptic; the front ones having five leaves and being 40 inches long by $1\frac{3}{4}$ inches wide, while the rear ones have seven leaves and are 42 inches long and $1\frac{3}{4}$ inches wide. The running gear frame is of pressed steel, with a center section of $4\frac{1}{2}$ by $1\frac{1}{2}$ inches by 3-16-inch thick, tapering at the ends. A sheet metal

partition is placed a couple of inches behind the fan, which prevents the hot, dusty air from being discharged into the engine space. A sheet metal apron completely encloses the under part of the chassis, extending from this partition back to the rear of the gear case. This, it is claimed, will keep out all dust and mud, and obviate the necessity of using a covering over the running parts of the engine.

The brakes are of the external band type with shoes, one being foot operated and the other hand operated. Steering is by a 15-inch hand wheel, which has an ignition contact push button inlaid into the under side of the rim. The steering gear is a worm and sector. The controlling devices comprise two foot levers and two side hand levers, besides the spark and throttle control on the steering post. The body is of the Roi des Belges style and is upholstered in black leather.

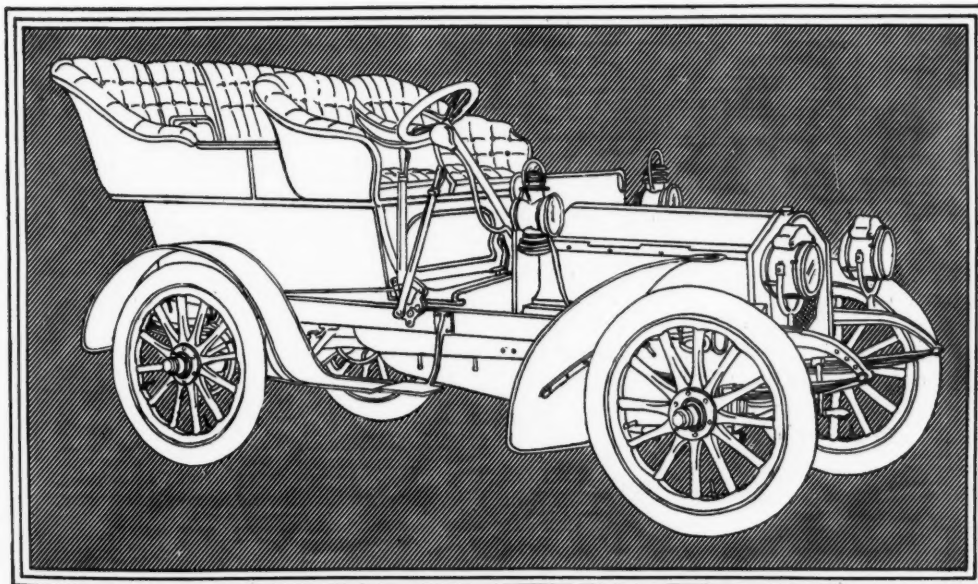
NEW BOOKLETS

The advantages and disadvantages of kerosene as burner fuel for steam vehicle boilers, the properties, good and bad, of different forms of kerosene burner construction and the principle and operation of the Lightning burner are treated exhaustively in a Burner Book issued by the E. C. Walker Co., of New Albany, Ind.

Tips on carburation and the operation of motors are an interesting part of the booklet describing the Gould carburetor, manufactured by the Gould Mfg. Co., of Trenton, N. J.

Oils Which Do Not Drip is the subject of a treatise on the non-fluid oils manufactured by the New York & New Jersey Lubricant Co., 14 Church street, New York. These oils are especially recommended for engine and crank shaft bearings, differential and transmission gears, driving chains, and ball and roller bearings of automobiles.

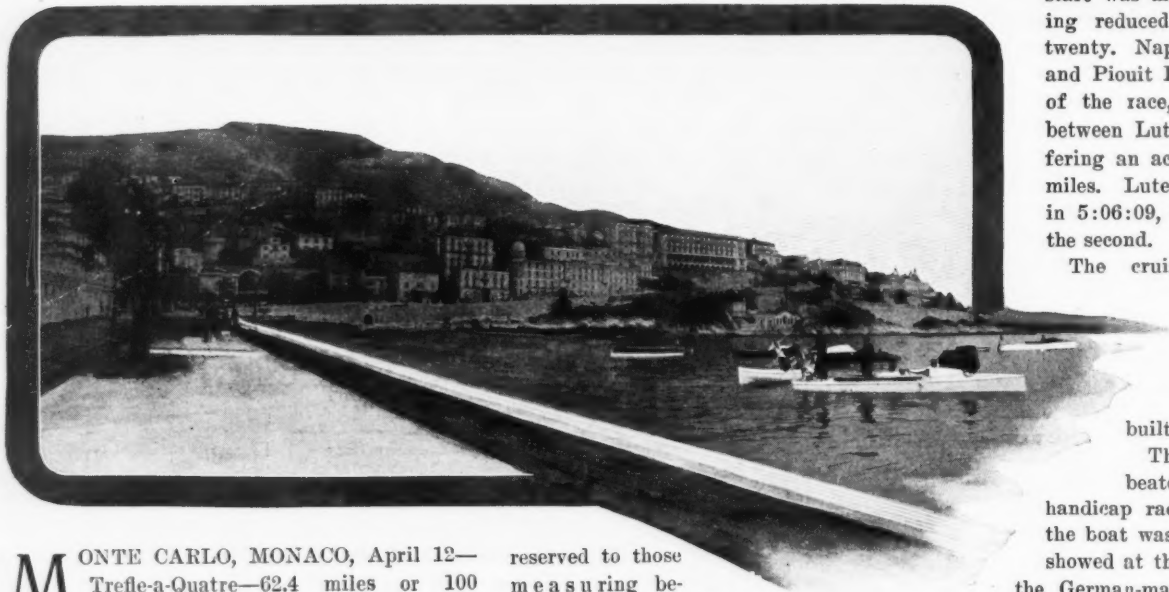
All sorts of storage batteries, from small ignition cells to forty-cell automobile batteries, are described in the new catalogue of the Northwestern Storage Battery Co., of Chicago, which makes a great variety of accumulators of the Faure type.



MOTOR AGE

THE STANDARD TOURING CAR

FAST CRAFT AT MONTE CARLO



MONTE CARLO, MONACO, April 12—Trefle-a-Quatre—62.4 miles or 100 kilometers in 2 hours 37 minutes 71.5 seconds, at the rate of 2 minutes 31 seconds per mile or 23.8 miles an hour.

One hundred and twenty-five miles or 200 kilometers in 5 hours 16 minutes 51 3-5 seconds, at the rate of 2 minutes 32 seconds per mile or 23 3/4 miles per hour.

This is the wonderful speed performance of the new racing craft, Trefle-a-Quatre, which made its debut in the water racing game last Wednesday.

Never before at any motor boat race did a craft show such surprising superiority of speed, and never before was the enthusiasm so great and the ovation given its owner and its master so tumultuous. The reason is, first, because very little was known about this French-built motor boat and almost everybody expected to see the famous foreign-made boats make a clean sweep of everything. Neither the fast Mercedes belonging to C. L. Charley, nor the new one belonging to Jellineck-Mercedes, nor the Lutece and the two English Napiers were a match for Georges Richard-Brasier's 80-horsepower flyer. Once in the water, it simply ran away from the others and could not be overhauled.

There were many races for all kinds of racing boats and cruisers, but after the second day's events, when the new French craft was started for the first time, the general interest was concentrated upon it, and the several thousand enthusiastic followers of the sport did not care much about any of the races except those in which the newcomer figured.

The first day's events were for racers and cruisers, the former having to cover a distance of about 94 miles, the latter only a little over 37 miles. The racers were not to measure over 31 feet. The maximum length of the cruisers was 25 feet. Seven racers and six cruisers started, but the race for the former was soon reduced to a match between Princesse Elisabeth and Rapee III. After being close together for several hours the latter managed to gain a lead, finally winning by almost 25 minutes, her time for the 94 miles being 4 hours 33 minutes 22 1/2 seconds. The race between the smaller boats was more exciting and Marguerite only won the cruiser's event by 1/2 of a second.

The fast racers made their first appearance at the meeting on the second day in the race

reserved to those measuring between 31 and 47 feet.

The distance of the race was 200 kilometers—125 miles. There were only four starters, but, as at Nice, the quality of the few made up for the lack of quantity. Two German boats, Mercedes and Mercedes II; the English racer, Napier-Minor, and the French defender, Trefle-a-Quatre, were the competitors. One may imagine how the onlookers felt. As it was a decided cosmopolitan crowd, the discussions about the merits of the boats and the probable outcome of the race were lively.

The time allowance was 10 hours and hardly 5 had elapsed when the, until then, unknown French racer completed the course, almost 3 miles ahead of Mercedes, completing the 125 miles in 5 hours 15 minutes and 51 3-5 seconds. It was during this race that the 100 kilometers were covered in 2 hours 37 minutes 7 1-5 seconds, the fastest time ever recorded for such a boat.

The cruiser's race was quite uninteresting and Peugeot III proved the fastest among the ten boats which started.

The third day's program was reserved for racers from 47 to 71 feet in length. It was not exciting and the time of the winner, Rotceh, which covered the 77 1/2 miles in 6 hours 33 minutes 26 seconds, was considered fair owing to the rough sea. The event for steam motor boats could not be run off, owing to the Gardner-Serpollet entry being withdrawn at the last moment. A race for motor-propelled fishing boats was won by Dalifol I, covering the 40 miles in 5 hours 58 minutes 14 seconds.

Friday should be long remembered by those who followed the tournament, owing to the spectacular blaze which occurred on board Parisienne II. This racer had trouble during the race of the previous day, but this time it was put out of service. It belongs to the class of large racers measuring 71 feet, and has three 60-horsepower Mors motors. At the time of the fire, which is said to have resulted from the bursting of a pipe, there were about 800 liters of gasoline on board. An explosion was expected every minute, but, thanks to the presence of mind of those on board, nothing really serious happened. Four of the crew jumped overboard when a relief ship was within a few feet. They had put on their saving apparatus and were but slightly burned.

This race, in which several of the best boats had started, was called off, and a new start was made, this time the distance being reduced to fourteen laps instead of twenty. Napier I, Dubonnet, Lutece, Femina and Piouit IV started in the racer division of the race, which soon became a match between Lutece and Dubonnet, Napier suffering an accident after having covered 30 miles. Lutece won, covering the 108 miles in 5:06:09, over half an hour faster than the second.

The cruiser division was run over a distance of 100 kilometers and was won by Vas-Y in 4:25:18 1/4. The other starters were France, Usona II, an American-built racer, and Suzy.

The first defeat of the so far unbeaten Brazier craft came in the handicap race Saturday. For some reason the boat was unable to develop the speed it showed at the preceding races and this gave the German-made craft their first chance of making a good showing. Charley's Mercedes I won with a big lead from Lutece, Dubonnet, Princes Elisabeth and Rapee III. Again did the event for cruisers prove uninteresting, although there were many starters.

The usual French crowd gathered along the shore on Sunday when the 100 kilometers handicap was run. It was a brilliant race, although the weather was very disagreeable. Trefle-a-Quatre was scratch and lost, but not until a real battle of giants had been fought and the giant French craft again had proven very conclusively that it is the fastest motor boat in European waters and probably in the world. Princess Elisabeth was the winner, the one which ought to feel highly flattered, although she won by only 25 seconds from a handicap of over that many minutes. Dubonnet, Rapee III, Mercedes and Lutece were the other contestants.

The mile and kilometer races were merged on Monday, the time for the latter distance being taken during the mile race. Trefle-a-Quatre won her heat very easily from Mercedes I, and so did Rapee. Lutece had a walkover in the third heat. The three winning boats met in the final, which resulted in another splendid victory for the French boat. It was such an easy affair for her that it was a pity to see the other two trying to lessen the distance which would eventually separate them from the water monster.

Today, the last of the tournament, a handicap was run over a distance of about 77 1/2 miles. It was a tame race after the fine events of yesterday. None of the faster boats took part in it and Titan II won from Princess Elisabeth, with Napier Minor a good third.

The motor boat exhibition is probably the greatest that was ever held. Sixty-one boats, from the small fishing craft to the monster racer, are shown, and truly international is this show, because there are boats from Germany, Italy, America, Switzerland, Belgium, Austria, England and France. It is as cosmopolitan as the salon du Grand Palais.

Prince Albert I of Monaco opened the exhibition and several hundred invited guests from the army, navy, nobility and the industries and numerous foreign visitors attended, in addition to the general public.

Many of the boats were closely examined

by the connoisseurs. The 47-foot Gardner-Serpollet steam racer, for which 100 horsepower is claimed; Rapee II and III, each measuring 31 feet, the former having a 24-horsepower and the latter a 35-horsepower Panhard motor; the 180-horsepower Parisienne II; Trefle-a-Quatre, a four-cylinder 80-horsepower Georges Richard-Brazier craft; the 70-horsepower Lutece; the two 80-horsepower Napiers; the two 90-horsepower Mercedes racers; the three American boats, New York, Newport and Usona II, were those which seemed to interest the visitors mostly.

That this meeting was a grand success was commonly acknowledged. It has probably done more to interest people in motor boats than all the contests which took place last year. Just as after the Paris-Berlin and Paris-Vienna automobile races, the manufacturers claim that the effect of the week's races will be very beneficial to trade. "We needed such an event, to keep people reading and thinking about motor boats for a long time. A day's tournament is too quickly forgotten, while a week of races is bound to create a lasting interest," said a Paris manufacturer.

The topic most discussed was the marvelous performance of Trefle-a-Quatre and never before was a maker subject to so much hand-shaking and expressions of further success as the builder of the craft. Other boats were given due credit, too, and for regularity of running the two Mercedes boats were accorded the most general praise.

CENTRAL NEW YORK RACES

Syracuse, N. Y., April 18—The Inter-lake Yacht Racing Association has decided to have classes this summer for power boats in the annual regatta to make interest more general. The races will be held during the 2 weeks between August 8 and 22 on Cayuga lake at Kidder's Ferry and at Union Springs.

It is estimated that there are more than 200 power boats owned in and about Syracuse and central New York and this year the association is planning to attract the owners of as many as possible to the regatta. In addition to the class races for power boats two match contests have been arranged. One of these will be between the 80-foot steam yachts Augusta and Clara, owned respectively by Charles Kellogg, of Ithaca, and Henry Westinghouse, of New York, who has a summer residence at Sheldrake on Cayuga lake. The second match race will be between smaller craft, and results from a match race last year between the same motor boats, Firefly, owned by J. E. McIntosh, of Auburn, and Mab, owned by Hiram Haskins, of Ithaca. The Haskins boat won last year.

PROTEST GROSVENOR BILL

Washington, D. C., April 18—That the public is alive to the manifest injustice of the Grosvenor bill, providing for certain requirements for vessels propelled by gas, fluid, naphtha, or electric motors, is evident from the large number of petitions and letters protesting against the enactment of this bill which have been received by the house committee on the merchant marine and fisheries, of which committee Representative Grosvenor is chairman.

Supplementing the public hearing on the bill before the committee, when a large number of motor boat manufacturers and others gave their reasons why this bill should not be passed, as reported in MOTOR AGE at the

time, boat owners in all sections of the country have sent to the committee the strongest protests against the bill. Among these protests is one from the Chicago Yacht Club, which, at one of its meetings, requested Judge-Advocate Hacker to write, in the name of the club and in the name of the amateur yachtsmen of Chicago, protesting against the pending measure.

Among the numerous petitions and memorials filed with the committee may be mentioned the following: The Buffalo Launch Club, Buffalo, N. Y., enters an emphatic protest against the Grosvenor bill.

J. P. Turner & Co., New Smyrna, Fla., protests in the very strongest terms possible against the passage of the bill. They say: "If necessary, we could forward a protest from 500 launch owners from the state of Florida, and unquestionably every other state would furnish the same proportion of protests. Such a law as proposed would put at least four-fifths of the launches on this coast out of business."

T. T. Wells, a prominent New York attorney, says: "It seems to me that such a bill is utterly indefensible and unnecessary."

J. R. Alcock, of Chicago, says: "To subject boat owners to such unnecessary annoyance, it seems to me, would not compensate anyone or be of any benefit to a city; on the other hand, it would have a tendency to remove from our city one of the instruments designed to beautify Chicago and its surroundings. We have too many means of taxing property owners and people who are an actual benefit to Chicago."

The Eastern Yacht Club, Boston, says: "In our opinion, the law as it stands is sufficient protection for the public, and if this bill passes it will inevitably injure, and in many cases ruin, the business of a very large number of persons, without compensating advantages to the public."

Ten citizens of Worcester county, Maryland, protest against the bill on the ground that it "destroys the purpose and end for which the power boat was built and for which it is so nicely adapted."

The North Side Board of Trade of New York City forwards a resolution adopted to the effect that "the provisions of this bill are deemed unreasonable and prejudicial to the

use of small pleasure craft, and that this board enters a most emphatic protest against the measure."

One hundred citizens of New London, Conn., earnestly protest against the bill.

Fifty citizens of Five Islands, Me., have asked their representative in congress to oppose the measure, saying: "This law, if passed, cannot help from being a great discouragement to all concerned in the manufacture of motors, boat builders, and parties using motor boats."

Ex-Vice President Levi P. Morton and Whitelaw Reid, the well-known editor, sent strong protests against the passage of the bill.

The above quotations are taken at random from the immense correspondence on the subject sent to the committee and indicate very plainly the feeling against the bill. Protests continue to be received, but it is impossible to tell the fate of the bill.

IT'S THE TADPOLE DITCH

Chicago, April 19—It seems impossible to rid people of the idea that the waterway to St. Louis includes the drainage canal. This is an error. Parties going southwest from Chicago by water must continue to use the Illinois and Michigan canal, as they did before the drainage canal was ever thought of, or else pay for a lot of portage at Lockport. The Illinois and Michigan canal, about which so much has been printed in the daily papers of late, runs alongside the drainage canal, it is true, and there is plenty of water in the latter. But at Lockport the traveler who has come down by the drainage canal, along with the microbes that have made Chicago famous in St. Louis, must have his boat carried 1,000 feet or so over to the old tadpole ditch. And there will be just 67 miles of the tadpole ditch before La Salle is reached, and the Illinois river entered.

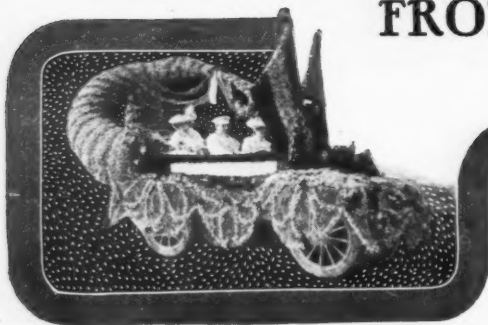
Charles P. Root, of the Truscott Boat Mfg. Co., has just gotten out charts of the Illinois and Michigan canal from Chicago to La Salle and of the Illinois river from La Salle to the Mississippi. The charts consist of a carefully-prepared series of blue prints giving all the islands, dams, locks, wing-dams, bridges, shoals and lights in the 345 miles from Chicago to the Eads bridge, St. Louis.



MOTOR AGE

THE MOTOR BOAT EXHIBITION AT MONTE CARLO

FROM THE FOUR WINDS



The Miller-Mundy Motor Car Co., Utica, N. Y., handles the Winton, Pierce, Cadillac and Autocar.

Thirty-nine automobile owners of Binghamton, N. Y., met last week and decided to form an automobile club.

Last Sunday's run of the Long Island automobile club was to Far Rockaway, L. I., by a new route, cutting out Jamaica. The day's run was 50 miles.

L. B. Garrison was elected president of the Elgin Automobile Club, Elgin, Ill., last week, and J. Thomas secretary. The club has about thirty charter members.

The town board of Lapel, a little village somewhere in Indiana—not Missouri—passed an automobile ordinance last week. There are two automobiles in the Indiana metropolis.

Several Paris theaters are now using motor wagons for carrying scenery. The gain in time has been found to be so great that most all of the larger play houses have ordered one or more such cars.

Chief Swingley, of the St. Louis, Mo., fire department, has asked an appropriation of \$1,200 with which to purchase an automobile. He intends to find out whether an automobile will be more efficient than a horse for all-around service.

A Wilmington, Del., newspaper reports that an automobile factory will probably be located in the town within a few months. Capitalists bought a large tract of land a few weeks ago and work will begin at once in the erection of the plant.

H. A. Mack, formerly manager of the Haynes-Apperson branch store in Lima, O., has opened a salesroom at 125 East Market street, Lima, and will handle both medium and high priced cars. A full line of supplies will also be handled by the new Lima dealer.

Up to date 4,800 automobile licenses have been issued at Trenton, N. J. A great many owners are exchanging their last year's run-arounds for touring cars. The decrease in applications for licenses for light cars is great, being only 3 per cent, while last year it was about 80 per cent.

During February, 538 motor cars were imported into Great Britain, their value amounting to \$890,395. During the same length of time parts to the amount of \$103,180 were imported, making a total of \$993,575, which is nearly \$288,000 more than the corresponding period last year. During the same period sixty-five British cars were exported and, to-

gether with parts sold abroad, the exports amounted to \$135,336, an increase of nearly \$28,000.

The New Jersey Automobile and Motor Club, which now has 140 members, will hold its annual election May 2.

Mrs. Robert Louis Stevenson has purchased a White steamer from the San Francisco offices of the White Sewing Machine Co.

The Dayton Electrical Mfg. Co., of Dayton, O., has issued a comprehensive booklet descriptive of all of the articles in its line of electrical ignition specialties.

An automobile club has been organized in Austin, Texas, Dr. T. J. Bennett being named president, Pierre Bremond vice-president and Eugene Tips secretary-treasurer.

According to reports from local dealers the trade is very brisk at present in Portland, Me. Although the weather has not been all that could have been wished, many cars were sold within the last few weeks.

Morgan & Harding, automobile and bicycle dealers, of St. Louis, Mo., are erecting a two-story and basement brick garage. It is 83 by 150 feet and will be equipped for general repair and storage purposes.

At a meeting of the Worcester Automobile Club, Worcester, Mass., held last week, the club voted to join the state association. Percy Pierce, of Buffalo, N. Y., and Elliott H. Lee, president of the state association, addressed the members of the club.

Calvin T. Paxon, the traveling representative of the E. R. Thomas Motor Co., of Buffalo, N. Y., is now on the coast in three-cylinder interests. His western trip includes Denver, San Francisco, Los Angeles, Portland, Seattle, St. Paul and Minneapolis.

The Macnish Automobile Co., of St. Louis, Mo., has rented for 5 years a property 50 by 155 feet, located on Olive street, and will soon start the building of a salesroom and garage. The two-story store will cost about \$20,000 and the owners expect it to be ready some time in June.

Hopkins Bros., Des Moines, Ia., have transferred their automobile and accessories business to the Fageol-Aldrich Co., at 409-411 West Ninth street. The new concern will have the agency for the Oldsmobile, Autocar and Orient buckboard, besides carrying a full line of appurtenances and supplies.

The Bruck Solidified Oil Co., of Boston, Mass., is introducing to automobilists a solidified oil which can be used in compression cups, on gears, chains, axles and other car bearings. The company claims that neither alkalies, acids, water nor heat are employed in the manufacture of this lubricant and that the process is simply the solidification of high vis-

cosity lubricating oils by a method which does not destroy the initial qualities of the oils. Samples will be mailed to automobilists upon application.

The Automobile Club of Germantown, Philadelphia, Penn., has purchased a lot at Carpenter and Emlen streets, where it intends to erect a \$10,000 clubhouse.

St. Paul, Minn., unlicensed motorists will please take notice that the state boiler inspector, R. H. Johnston, is after them for not having taken out the required licenses.

Denver, Col., is to have a new garage in the near future. Harry K. Brown is erecting the building on Court place and it will temporarily have only one story. Later on two more will be added.

During 1902, \$862,960 worth of automobiles and motor cycles were imported by Germany. Official reports show that there was a decided increase during 1903, the amount being \$1,218,000. Over two-thirds of the cars imported were of French manufacture.

The chief of police of Hamilton, O., has noticed that the automobile speed limit of 6 miles an hour is not being obeyed by the automobilists of that progressive little city, and he has instructed the local bobbies to corral all who fracture the law.

F. W. Vogler, president of the Redrock & Salmon River Stage Co., of Redrock, Mont., last week purchased a 24-horsepower Peerless touring car for use in Montana. The use of this car is preparatory to the substitution of automobiles for the horsedrawn stages now used in the company's system.

At a recent meeting of the electors of Nepeuskun, Wis., a resolution was adopted concerning the running of motor cars through the town. The maximum speed permitted is 12 miles per hour and in crossing a public highway and over the crest of a hill the car must be slowed down and driven not faster than 4 miles per hour.

The Springfield Automobile Mfg. & Garage Co., of Springfield, Ill., is now located in its new, especially equipped establishment, and in addition to its manufacturing operations will conduct a general repair and garage business. The company's station will be the headquarters of the St. Louis tour automobilists when they pass through the Illinois state capital.

Prominent members of the Society of Motor Manufacturers and Traders of England have started a movement in favor of holding next year's show at the Olympia instead of the Crystal palace, the principal reason for the change being that the palace is too far from the center of the metropolis and the expense too great. The main floor of the Olympia provides for over 100,000 square feet of exhibition space and almost an equal amount is available in the galleries.

O. H. Dietrich, who was an exclusive bicycle dealer for many years in Allentown, Pa., had his new two-story building, 40 by 110 feet, completed a few weeks ago and has added a line of automobiles to his growing business. The Cadillac and Franklin will be handled by Dietrich, who had the business incorporated re-

cently under the name of O. H. Dietrich & Co. The store is located at 24-26 North Tenth street, in one of the busiest parts of the Pennsylvania town.

A 23-foot, 16-20 horsepower Fiat motor boat has been sold to a well known New York yachtsman and automobilist, who will race it on the St. Lawrence this summer.

The White Sewing Machine Co. has established a branch at Brick Church, Orange, N. J., for the sale and care of White steamers in the district around Orange. It is under the management of Benjamin F. Adams.

A Milwaukee journal reports that for the first time in the history of Milwaukee the city council has real chauffeurs among its members. George J. Lonsdorf and Sherburn M. Becker are the automobile city fathers.

The Oldsmobile has won fresh honors, this time in far away India, where, at the Mahon-Mela exposition, recently held in Calcutta, this pioneer runabout was awarded a gold medal. The medal was won in competition with both French and English makes, but, as in the British reliability trials, the Oldsmobile carried away the honors, and aided in the battle for American supremacy.

At a recent meeting of the board of trustees of the Rockford Automobile Club, Rockford, Ill., the following new members were admitted into the club: Dr. S. C. Andrus, H. L. Cole, Dr. E. C. Dunn, George Woolsey, Dr. Roberts, L. G. Harrison, H. Laverne Cole and Frank Duel. It is likely that after the A. A. A. and A. M. L. have been merged the club will join the new organization.

Buffalo will become quite a motor boat center. There are many boatmakers and in most every small factory motor boats are being made. The Buffalo Gasoline Motor Co. and the Lackawanna Motor Co. have sold many marine motors and individual buyers are having boats made to order. The coming summer will find hundreds of little boats being propelled by motive power in that section.

The Truscott Boat Mfg. Co., of St. Joseph, Mich., shipped this week a 77-foot full-rigged motor yacht as the main feature of its exhibit at the St. Louis fair. The boat is magnificently finished in mahogany, has a bridge, all the comforts of home, and a 60-horsepower motor of the four-cylinder four-cycle pattern. Besides this boat, the company will exhibit all sizes of motor boats, motors, row boats, and canoes, making the greatest single affair of the kind ever attempted.

Word comes from Providence, R. I., that the action of the American Power Boat Association in accepting the Rhode Island Yacht Club as a member will probably result in the realization of a scheme which yachtsmen have had in their minds for some time—that is, a race of power boats in Narragansett bay. Last year an attempt was made to have a race of launches before the yachting season was over, but the plan failed to materialize. Now that the club has become a member of the national association a race during the coming summer is assured, in which all members of the association will be allowed to participate. No

definite plans have yet been made, but a delegate to the association has been chosen in the person of Fred S. Nock, of East Greenwich, R. I.

Indian motorists do not like the European and American idea of numbering cars and have begun a campaign against the proposed measure.

The Massachusetts branch of the Good Roads Association held a meeting in Boston April 12 at which Asa Goddard, president of the Worcester Automobile Club, was elected a member of the committee.

The Automobile Club of Italy, which has its headquarters at Genoa, has elected the following officers: President, Engeneer Cesare Gamba; vice president, Marquis Domenico Pallavicino; secretary, M. Michelangelo Oliva; treasurer, Chevalier Giulio Scorza; members of the council, Marquis Gerolamo de Mari, Count Carlo Roggio, Chevalier Garibaldi Coltelletti, Commandant Cesare Balduino and Vitale Rolla,

For the Recope cup, which is open to motor boats using heavy oil as fuel, the French minister of marine has informed the organizers that the government will give gold and silver medals. The Automobile Club of France has contributed \$1,000 and the Automobile Club of Great Britain and Ireland \$500 for prizes. Several yacht clubs and individuals have also offered prizes. The event will take place August 8.

A week of automobile and motor bicycle races has been arranged to take place during the month of May in Buenos-Ayres, Argentine Republic, South America. A special prize has been offered by the city council and all told the value of the prizes is reported to be over \$5,000. The agents for the Panhard, Mercedes, Fiat, de Dietrich, Mors, Darracq, Renault, de Dion, Griffon, Peugeot, Werner, Adler, Humber and Iris have entered cars.

Although the motor boat race from Paris to the sea, otherwise called the Paris-Deauville race, takes place in August, twenty-eight racing boats have been entered. Among them are two Napier boats, one of 80, the other of 50 horsepower; Mercedes II, 90 horsepower, belonging to C. L. Charley; Serpollet, 100 horsepower, belonging to Gardner-Serpollet; Thornycroft, 60 horsepower, owned by M. Thornycroft, and several racers built by Clement-Bayard, the Hotchkiss Co., Panhard and Renault.

Even the lay press is becoming expert and critical in motor boat matters, as witness the following: "In view of the growing interest in the exciting marine sport furnished by powerful motor boats, the special cable dispatch from Monte Carlo this morning will be widely read and discussed. Defects in the present type of these little vessels, as revealed by experience in the recent races, are clearly indicated. When participants in the contests find their nerves shattered and the rivets in their boats shaken loose, it is evident that there is something wrong. Our special cable dispatch points out the lack of correlation between the designers of the boats, the constructors of the motors and the designers of the screws, and suggests the lines along which the improvement of these powerful little craft must be sought."

Boston has the motor boat racing fever and will soon announce a list of races to take place the coming summer.

H. J. Leighton, of Syracuse, N. Y., has just finished a 55-foot boat with 120-horsepower motor which is claimed will do 24 miles an hour.

A motor boat regatta is scheduled for Saratoga lake, New York, for July or August. The lake is 5 miles in length, so that a 10-mile race is possible in one heat.

Notwithstanding the miserable weather Chicago is having, several motor boats have been put into the water for the season, three being quartered in Lincoln park.

The first number of Motor Boat, edited by Frank P. Prial, has made its appearance. It is nicely gotten up, well printed and is filled with such matter as should interest the average motor boat man.

The Schlig Automobile Works, Evanston, Ill., was organized recently and is owned by Mark W. Shaw, of the Roth-McMahon Machine Works; John Green, who was formerly connected with the Locomobile Co.'s branch house in Chicago, and John Schlig. A garage with storage room and charging station is located at 1725 Maple avenue. A repair shop is located in the Park building, near Davis street and the railroad tracks. Two cars are now being built by the concern.

While in most other cities the police force is on the warpath against automobile scorechers, in Buffalo, N. Y., the dealers, owners and a majority of the members of the automobile club have taken the first steps in complaining to the police department against the law-breakers. At present a speed of 8 miles is permitted in part of the city, and in other parts 10 miles is the limit. According to the new law passed in Albany, N. Y., the speed outside of the 10-mile district will be 15 miles an hour to the city limits and 20 miles per hour in the open country.

In proportion to its population Rockford, Ill., has a greater number of automobiles than most any other town in the west. One for every 500 inhabitants is the proportion. The sixty-five cars are subdivided as follows: Rambler, Knox, Cadillac, Oldsmobile and Columbia, five of each; Baker, eleven; Winton and Ford, four; Waverley, Toledo, Orient, Autocar, three of each; Toledo, two; Thomas, Peerless, Conrad, Cotta, Michigan, Geneva and Decauville, one each. It is also a feature that thirty-one of these cars are touring cars, while only thirteen belong to the runabout class.

James Levy, manager of the automobile department of the Mead Cycle Co., of Chicago, last week encountered hard times in trying to be a hero. A building across the street was blazing. Firemen and people were frantic. A girl appeared at the third floor window. "Who will save her?" shouted the chief. "I will," answered our dauntless hero as he dashed into the tumult of flame and falling beams. On the stairs he met her. "Come with me," he cried, but she shoved him cruelly aside and, walking down the steps, admonished, "If you try to flirt with me I'll have you pinched."

AMERICAN MOTOR LEAGUE

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Francis N. Bain, Newburg, N. Y.

OFFICIAL BULLETIN

MORE ABOUT AMALGAMATION

Last week a circular letter was sent to each member with a return postal card upon which he was requested to inscribe his vote for or against the proposed uniting of the A. M. L. and the A. A. A. into one national body. Two questions were submitted:

1—Do you favor the proposed uniting of these two national organizations into one?

2—May we send you a few membership blanks of the American Motor Association, in case the merger is effected, and will you aid the officers in such ways as you can to enlarge and strengthen the new body?

Answers are already being received and the sentiment expressed is so far unanimously in favor of the proposed union.

EVERY MEMBER SHOULD VOTE

All members of the A. M. L. are earnestly urged to place themselves on record in deciding this important question and to place the officers of the league in such position that they may report a large vote and therefore a very substantial interest on the part of A. M. L. members. To fill out the blanks on the postal card ballot requires but a moment of time, and in view of the importance of the proposition an expression on the part of each member is greatly desired.

On Friday of last week Secretary Butler, of the A. C. A., called at headquarters and reported that a ballot was being taken among A. A. A. members and that the decision of that body on the question of merger would be fully recorded by the end of the present month.

ROAD INFORMATION

One of the prominent works of the American Motor Association, in case the merger is ratified, will be to collect and distribute in the most substantial way, road information, maps, road books, etc., for the use of members in all parts of the country. That information of this kind is greatly needed is evidenced by many letters received at headquarters of both organizations and the great need of accurate road books and maps is admitted by every user of the public roads.

NEW YORK ROAD BOOKS

The road books already announced as in preparation by the A. M. L. have been held up, pending the question of the proposed merger, and when issued will undoubtedly bear the imprint of the new organization. They will be put upon the press as promptly as possible

—the plates are entirely ready for two of these books and are nearly ready for the third—and the work of distribution will begin as soon as they are out of the hands of the binder.

LISTS WANTED

The number of automobilists is increasing in all parts of the country and the A. M. L. reference lists must be kept up accordingly. The names and addresses of all automobilists are gladly received by the secretary and promptly recorded in the league card index files for future reference. If the reader can aid the league in enlarging this list by sending the names and addresses of neighbors and friends who have become users of motor cars let him write the names on a slip of paper or postal card and send it to headquarters. Such favors will be gratefully appreciated and promptly acknowledged.

CHANGE IN HEADQUARTERS

National headquarters of the A. M. L. have been moved to the Vanderbilt building at 132 Nassau street, New York city, a half block from former address. The new quarters are in many ways better adapted to the wants of the league than those formerly used, but in view

of the enlarged demands of the organization it is not unlikely that a further change will be necessary before the end of the year. Meanwhile, and until further notice, address all communications to 132 Nassau street, Vanderbilt building, New York city.

ROUTES TO ST. LOUIS

Chairman Augustus Post, of the A. A. A. touring committee, is also a member of the national touring committee of the A. M. L. and is doing valiant work in laying out and reporting routes to be followed by automobilists in trips from various parts of the country to the big exposition at St. Louis. Much of this information will be sent out broadcast through the newspapers, but special reports will be made from time to time to members of the national body. The tour will be conducted in the name of the new American Motor Association and all matters relating to the work and objects of either of the merging organizations will be carried on in the name of the new body as soon as the merger is complete. To say this is, in a sense, to forecast the result of the vote, but from the many expressions of approval which are being made on all sides and by members of both bodies it is highly improbable that the result of the vote will be other than largely affirmative.

ROUTE SLIPS

Several requests for route slips have been received at headquarters and the kind interest of members who have thus volunteered to help the league is greatly appreciated. All printing has been held up pending the decision of the merger question, and route slips will be delayed till about May 1, when they will be sent forward. Each route slip will contain brief printed suggestions explaining how it is to be filled out, so as to describe fully and accurately the route from point to point, giving the character and material of the road, whether hilly, rolling or level, and distances between principal points. Each route slip is to be signed by the member who makes the report and who thereby, of course, becomes in a measure responsible for its correctness. There is but one reliable way of getting road information and that is by co-operation of a large number of persons who are moved by a mutual interest. The present road books are largely unreliable and incorrect, and experience has shown that the expenditure of money alone will not by any means secure the return of correct road information.

THE AMERICAN MOTOR LEAGUE

is an organization to promote the interests of all users of motor vehicles; to ascertain, protect and defend their rights; to oppose and prevent the enactment of unreasonable and oppressive laws; to encourage the use of motor vehicles by agitation and instruction; to provide its members with printed routes, maps and guide books by which touring may be facilitated and encouraged; to promote the work of improving the public roads and the erection of proper guide boards, and other signs necessary to guide and warn the users of motor vehicles; to select and appoint official hotels repair shops and supply stations where its members may obtain reliable service at reasonable rates.

WHO MAY BECOME A MEMBER

"Any man or woman, 18 years of age or over, of good moral character and respectable standing, friendly to the motor vehicle and its interests, shall be eligible to membership."

(Constitution, Article 2, Section 1.)

The League is extending its membership in all parts of the country. We invite all friends of the movement to join and aid in building up a powerful organization.

NO INITIATION FEE. ANNUAL DUES \$2 IN ADVANCE, OR \$3, INCLUDING 1 YEAR'S SUBSCRIPTION TO MOTOR AGE.

TWO NEW AUTOMOBILE TIRES

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Instantaneously
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Introducing an entirely new departure in rim construction. ∴ Its detachable side flanges or beads are removed by the simple loosening of a screw, leaving a flat faced rim, from which the tire can be removed "like slipping a belt off a pulley"—a loose belt at that,

made under the G & J patents. This tire combines all the excellent qualities of that construction with many improved features of its own, hitherto characteristic only of **the foreign** makes

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Has many exclusive and original features.

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The Decauville rear wheels run on a heavy, fixed rear axle.

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Send for further particulars about "That Decauville Car."

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Licensed Importers Under Selden Patent

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Boston: The Lewis & Matthews Co.

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DIAMOND 1904 TIRES

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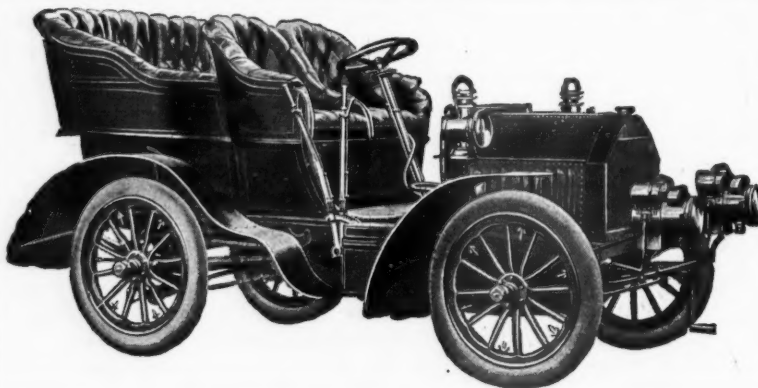
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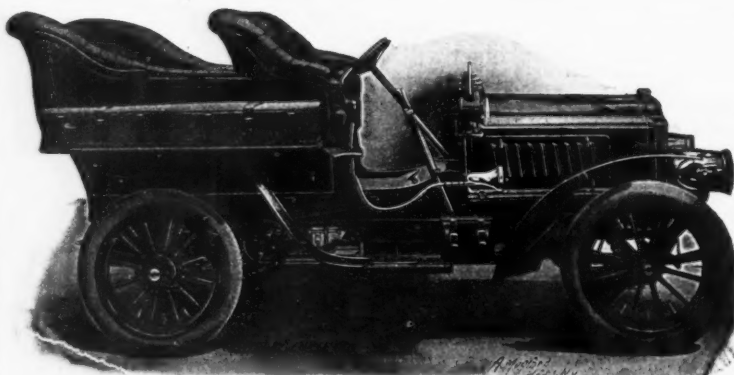
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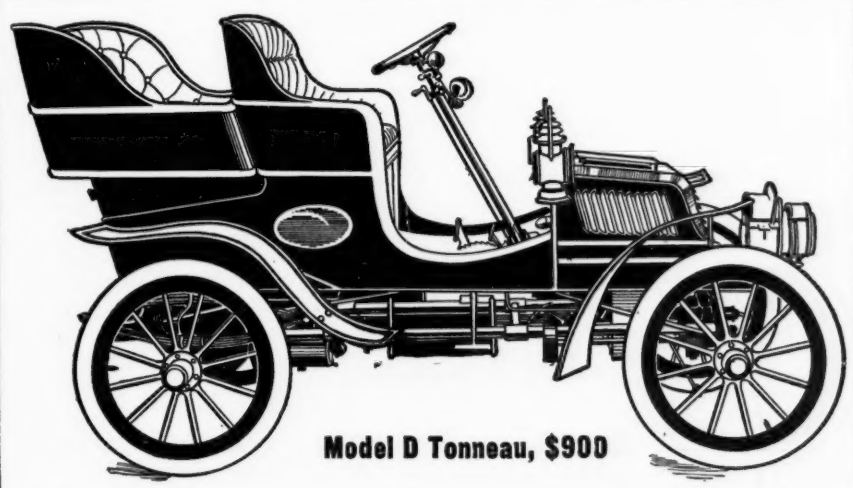
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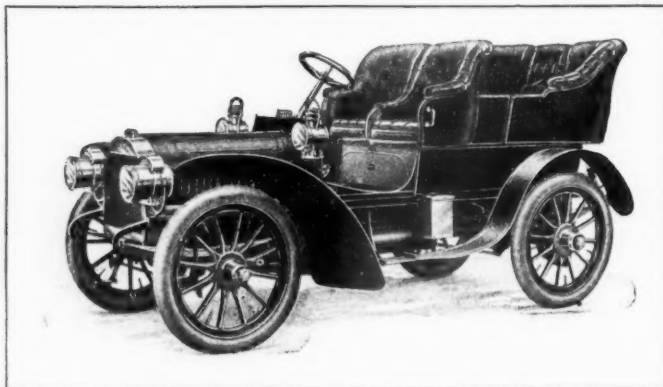
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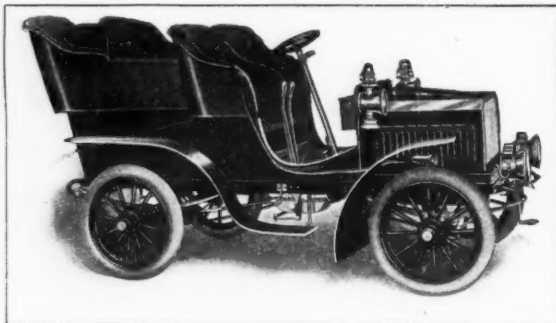
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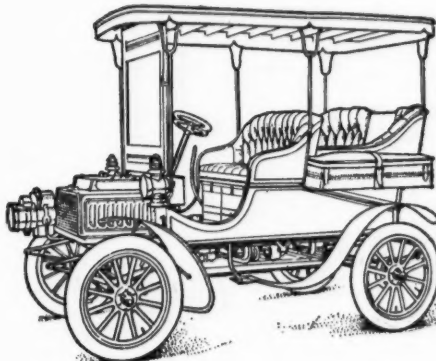
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Double opposed cylinders, 16 horse
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Double cylinder tonneau, complete
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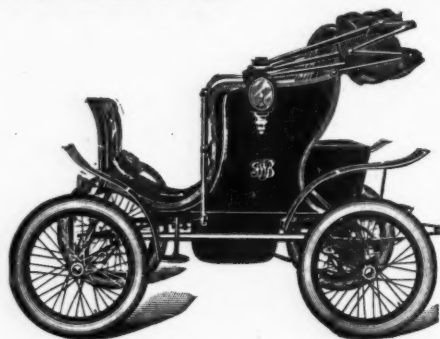
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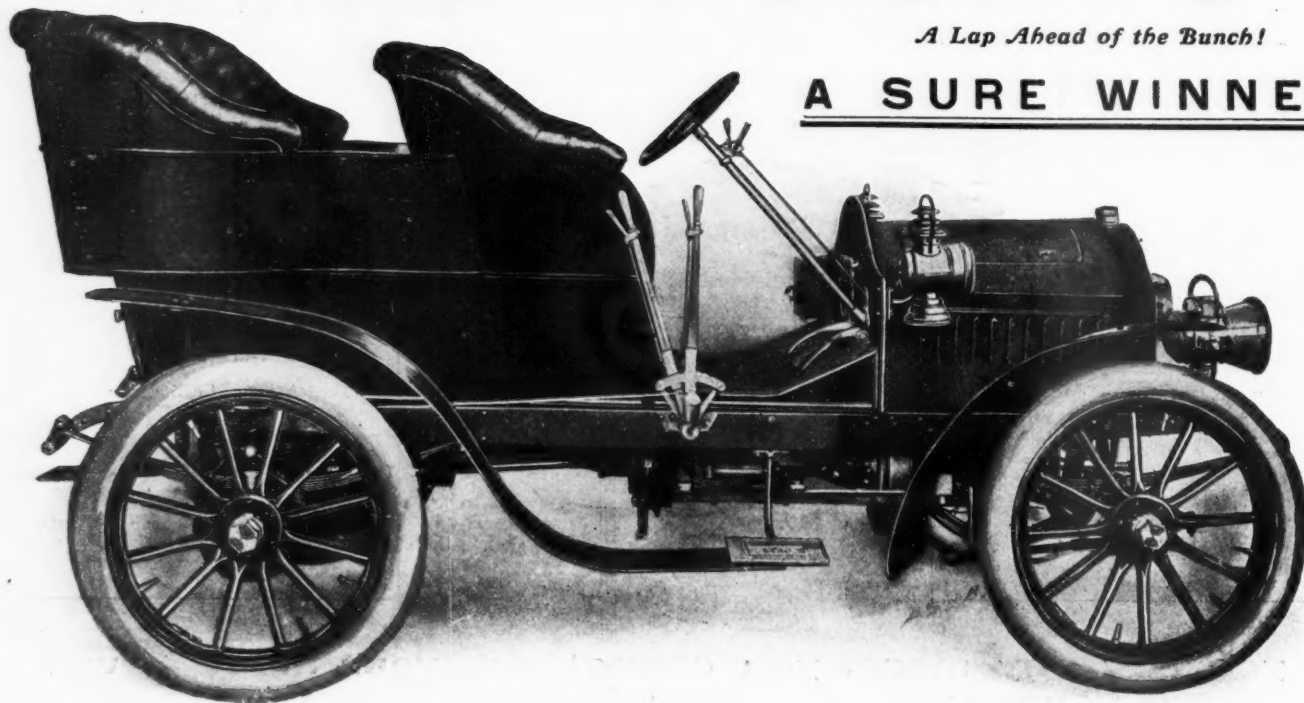
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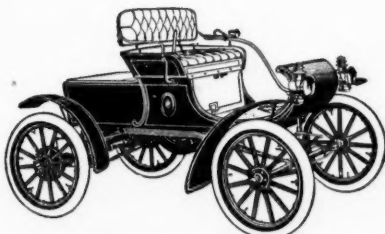
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They go where-
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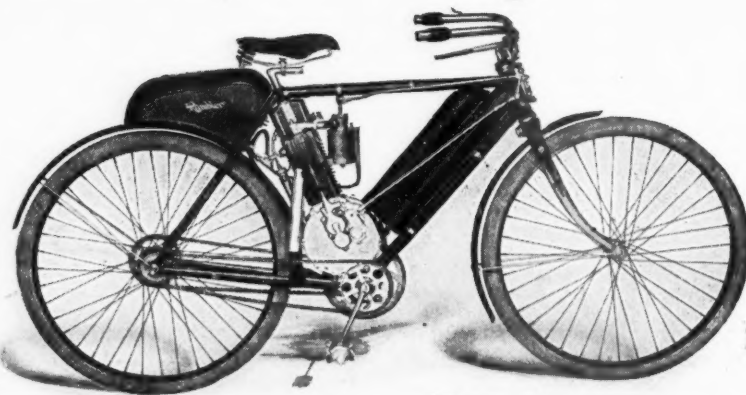
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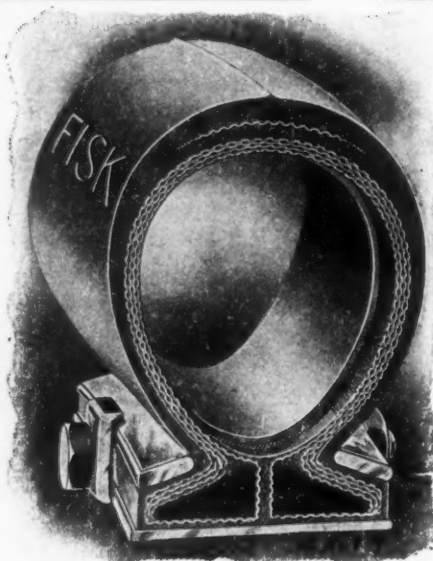
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DON'T WORRY

THE B-OK TIRE

does away with worry, making automobiling a constant pleasure. ¶ In ordering your car insist on having B-OK's, thus insuring yourself on tires. ¶ They give you comfort in mind and body. . . .



"The Tire That Tires Last"

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ONLY MAKER OF FINE
Automobile Clothing Exclusively
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MATERIALS—All Waterproof.

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By a Designer worthy of the name who will make appointments for consultation or answer mail communications.

Only high-class trade wanted.

BUSINESS SUITS,
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\$35.00
 35.00
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 Coachmen's and Chauffeurs' Outfits a Specialty.

Correspondence Solicited.
 Discount to the trade.

I will discuss the modes of foreign countries and their merits.

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For nearly a century established as a tailor.

You May Be Rich

but if you have gained your wealth at the expense of your health

You Are Poor Indeed

Regain your health and renew your youth at

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in the highlands of Southern Indiana, on the

MONON ROUTE

The remedial properties of the various Springs at these famous resorts are world-renowned for chronic ailments of Stomach, Liver, Kidneys and Bowels. You drink the waters—nature does the rest.

Excursion rate \$12.45 from Chicago. Three trains daily from Chicago. Through Sleepers

Hotel Rates range from \$8 up to \$35 per week including free use of waters. Accommodations from the plain boarding house up to the finest apartments and service to be obtained in the best metropolitan hotels.

Booklet telling all about the waters and giving list of the hotels and boarding houses with their rates sent free.

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BEAUTY
AND
EFFICIENCY



POWER
STRENGTH
SIMPLICITY

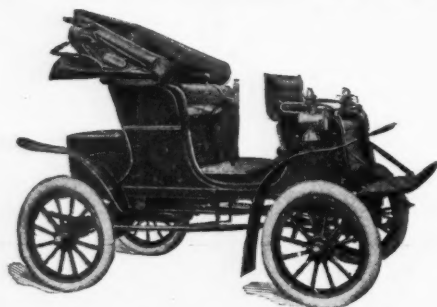
A FRONT RANK TOURING CAR
THE "FLYER"

SEE IT AT YOUR THOMAS AGENCY, OR WRITE FOR CATALOGUE

E. R. THOMAS MOTOR COMPANY, 1202 Niagara Street, **BUFFALO, NEW YORK, U. S. A.**

Members of the Association of Licensed Automobile Manufacturers.

"STEVENS-DURYEA" Gasoline Automobile



is distinctly a pleasure vehicle. A pleasure to look at, a pleasure to run, and embodies the fascinations of automobiling in the most perfect form. Beauty, grace and practical utility of the highest order are combined in the noted machine "that starts from the seat."

Its motor is 7 horse-power, has three speeds and reverses, all operated by the same lever. Possesses two cylinders of opposed type.

Send for illustrated catalog.

J. STEVENS ARMS & TOOL CO.

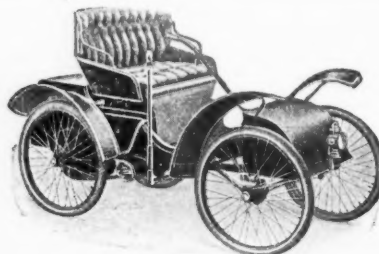
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CHICOPEE FALLS, MASS., U. S. A.

Member Association Licensed Automobile Manufacturers.

THE MICHIGAN Light Runabout

Light
Strong
Durable



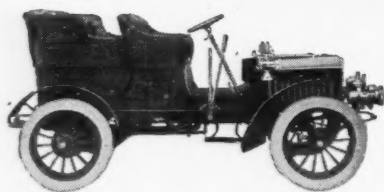
Neat
Fleet
Nobby

Price, Only \$475

This car is capable of carrying two adults over all ordinary roads at a good rate of speed. It is what the busy man needs—what the man of ordinary means can buy. Air cooled motor, runs summer and winter. Built throughout of best materials and with the greatest care. Cannot be duplicated for the price by anything on the market today. :: Send for 1904 Catalog and Statements of Users. :: Prompt delivery.

Michigan Automobile Company, Ltd.

Kalamazoo, Mich., U. S. A.



family car at a moderate figure. ¶ We expect you to see and inspect the Yale, but if you'll send for our book it will help you to appreciate this splendid car.

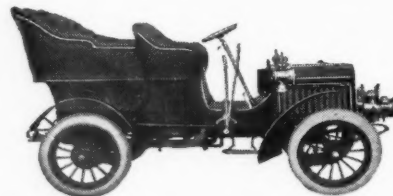
If a better car than the Yale can be bought in America for the same money it was not shown at any of the great Automobile Shows. If there is a car as perfect, at the price, it has not been heard from this season. Dealers, drivers and prospective purchasers with one voice pronounce it the happy medium between the noisy, inefficient runabout, and the ponderous, unwieldy racing machine. ¶ We merely echo expert opinion when we say that the Yale is quite alone in its class—a model

THE KIRK MANUFACTURING CO.

955 Oakwood Ave.

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Members Association Licensed Automobile Manufacturers.



Let us tell more
about the
Elmore
WITH
TONNEAU



\$850.00

THE ELMORE has been pronounced the most beautiful in appearance and most luxurious in appointment of any of the moderately priced cars. We think this is correct, but there's something more than that—in fact, that's the smallest claim a motor car should make. The motor itself makes the car. The Elmore is equipped with a special design, two cycle, one cylinder engine that is the result of five years of costly experiments which have been eminently successful. We have produced a motor that is more dependable than any four cycle motor made. Its simplicity of construction reduces opportunity for disorders and cost of maintenance to a minimum. It will climb hills that would stall any four cycle engine of same power and pulling the same load. It's worth while to read "One Long Jump and Two Short Steps," a unique booklet telling all about the Elmore motor. Our catalogue will be mailed free.

The Elmore Mfg. Co.

Members of the Association of Licensed Automobile Manufacturers.

804 Amanda Street, CLYDE, OHIO

National Motor Vehicle Co.

BOTH POWERS

ELECTRIC—GASOLINE

Ample Battery, large Tires, efficient Motors, a complete line. Western, Exide or Edison Batteries. Run-a-bouts, Stanhopes, Traps, etc., etc.

Four Cylinders at price of two. Bevel Gear at price of chain. Pressed steel frame, Double Steering connection, Roomy Tonneau.

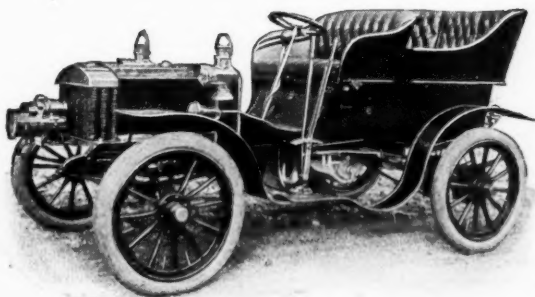
4-Cylinder, 3½x4, \$2000
4-Cylinder, 5x6, \$3000

Get our Catalogue and Circulars

National Motor Vehicle Co.

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NO STOP-OVERS ALLOWED



Do your touring in one of the St. Louis "Rigs that Run" and you don't need them. The St. Louis combines

**SIMPLICITY,
ELEGANCE,
DURABILITY**

What more do you want? We can give you anything from the Doctor's Favorite—our standard car—to the three cylinder, which beats them all. Write for catalog.

St. Louis Motor Carriage Co.
St. Louis, Mo.

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**High
Power**



TOURING CARS

Our twenty-four horsepower, two-cylinder opposed motor located under bonnet is the most powerful two-cylinder motor used on any car made. Easily as accessible as any four-cylinder motor. A large, roomy car for either four or six passengers. Early delivery for those ordering promptly.

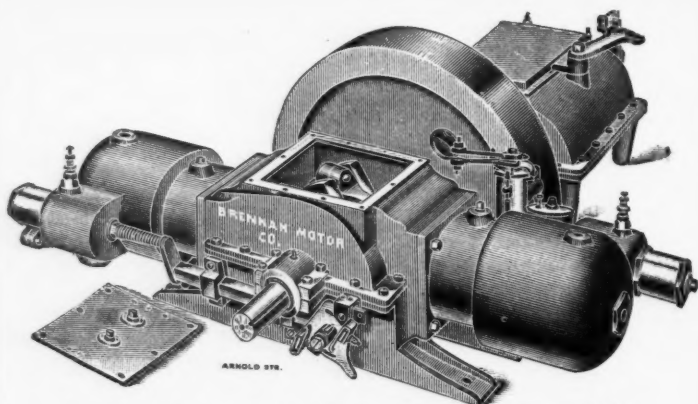
**The Best Car Built in America
For the Average Man to Run**

Write for prices and deliveries

Apperson Bros. Automobile Co., Kokomo, Indiana

Licensed Under Selden Patent

CHICAGO BRANCH: 394 Wabash Avenue



Sizes 8 to 30 H. P. Special 14 H. P. 1904 Model with Transmission.

Before You

buy an automobile it would pay you to investigate the motor problem. For the sake of economy in manufacture, many automobile builders either make or buy cheap engines. You pay enough for an automobile to get a good engine. It is the vital part of the machine. If it is a

BRENNAN MOTOR

You know it is STANDARD, and that :: :: you will have satisfaction :: ::

The tendency of the times are high powered cars. If you have not

SUFFICIENT POWER

write us. We can furnish you with a practical powerful motor ready to set up in your car with full working drawings of any standard makes of cars.

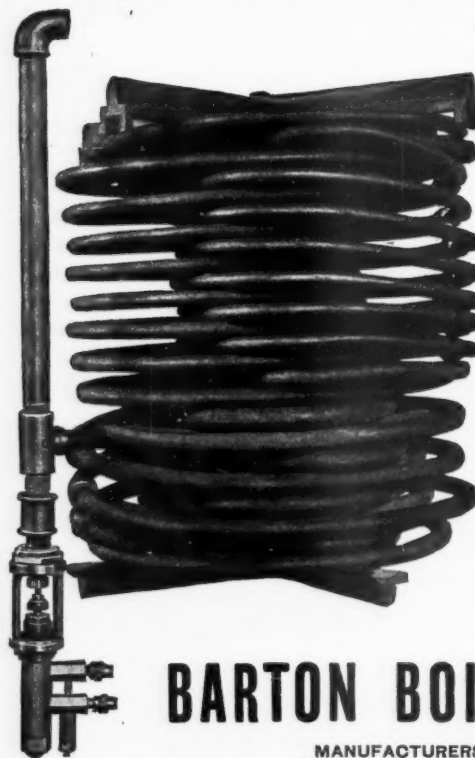
BRENNAN MOTOR CO., Syracuse, N. Y.

What we do—we do right



What we say we do—we do

NEW STEAM SYSTEM BARTON STEAM GENERATOR



Work Automatic

ROSENE
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No Boiler or
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Special quotations
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KEROSENE
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BARTON BOILER CO.

MANUFACTURERS OF

Full Line Flash Steam Appliances.

4212 to 4230 State St.,

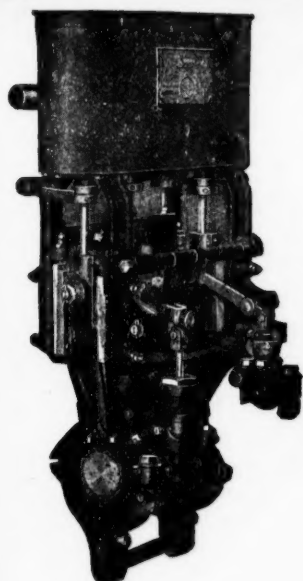
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WE FURNISH THE AUTOMOBILE MANUFACTURERS WITH COMPLETE FRONT AND REAR

Ball Bearing Axles

THAT ARE WELL KNOWN FOR WORKMANSHIP, DURABILITY AND EFFICIENCY

THE AMERICAN BALL BEARING CO., = = = Cleveland, Ohio



The... NEW MASON (Model "C")

includes all of the many excellencies of the original Mason Engine, with additional features, which give it a still greater lead ahead of all other steam auto engines.

We have made, operated and repaired more steam auto engines than any other concern, and have concentrated in the "Model C" all of the experience gained by this wide observation of all other engines.

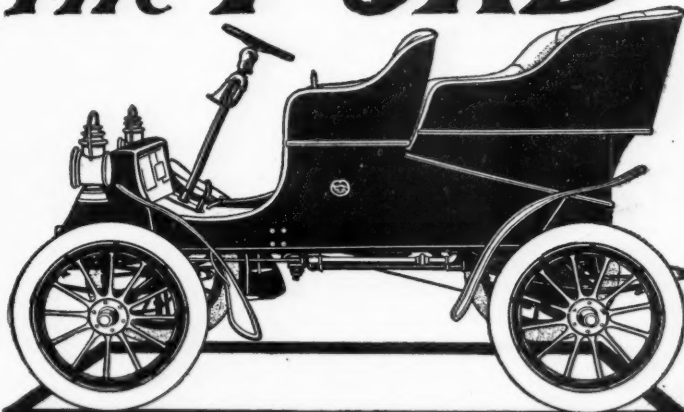
Our "Model C" catalogue will tell you all about this engine, and prove interesting to every autoist. It will be a pleasure to mail you a copy. :: :: :: Send postal card for it to-day

A full line of parts for all Mason Engines will be found at 147 Queen Victoria St., London, England.

THE MASON REGULATOR COMPANY
158 SUMMER STREET, BOSTON, MASS.

Kindly mention this publication in writing.

The FORD



OUR claim for the superiority of the Ford double opposed motor over the single cylinder is substantiated by the fact that without an exception all the \$2,000.00 to \$5,000.00 cars have two or more cylinders.

The Ford gives greater satisfaction and equals in speed, reliability and comfort any car sold at less than \$2,000.00.

Price, with Tonneau, \$900.00

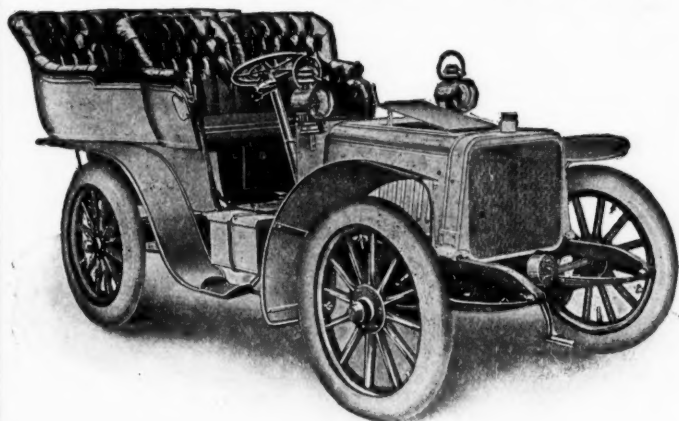
We agree to assume all responsibility in any action the Trust may take regarding alleged infringement of the Selden patent to prevent you from buying the Ford—"The Car of Satisfaction."

Write for illustrated catalogue and name of our nearest agent.

FORD MOTOR CO., - - DETROIT, MICH.

DARRACQ MOTOR CARS

Triumph over them all—First in Records, First in Sales, First in Reliability. 12, 15-20, 24-28, and 30-35 horsepower. Any style body desired. The Double Phaeton, with side entrance, and Tulip with swinging front seat, are the leaders



Model 1904 "King of the Belgians" Four-Cylinder Touring Car in 15-20, or 30-35 horsepower.

American Darracq Automobile Co.

Controlled by F. A. La Roche Company
Sole Agents and Licensed Importers under Selden Patent 549160.

652-664 Hudson St. and 147 W. 38th St., New York

AGENCIES

Chicago, RALPH TEMPLE AUTOMOBILE CO. Detroit, W. A. RUSSELL & CO. Philadelphia, 262 N. BROAD ST.

THE INCOMPARABLE WHITE

We claim for the incomparable White steam car that it is superior to anything else now offered in all the following particulars:

It is proof against explosion because there is nothing to explode.

Its generating plant cannot be damaged by negligence.

Both in operation and in care it is the perfection of simplicity.

Besides the above, the White has set a new standard in economical consumption of fuel and water, and has successfully refuted the misconception which has prevailed in some quarters, that steam power can be used only in small machines on account of its supposed extravagance in fuel.

White Bulletin No. 5 will be ready for distribution by the time this advertisement appears. Do you receive the Bulletins regularly?

White Sewing Machine Company
CLEVELAND, OHIO

IT KNOWS NO CLASS DISTINCTION



9-inch Searchlight on 60 H. P. Mercedes

THE RICH FIND IT MOST SATISFACTORY

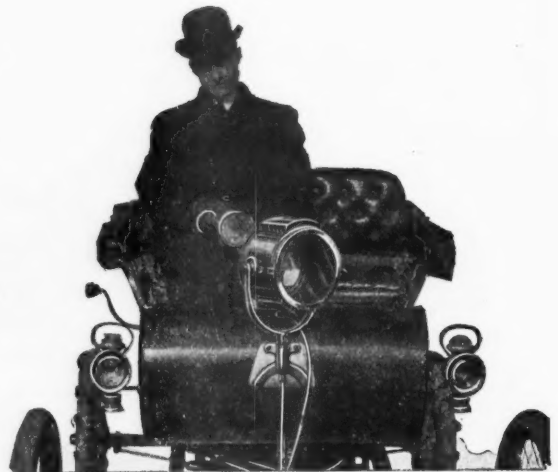
THE "POOR" FIND IT MOST ECONOMICAL

THE RECENT REDUCTION IN PRICE OF THE FAMOUS

RUSHMORE SEARCHLIGHT

PLACES IT WITHIN THE REACH OF ALL

Rushmore Dynamo Works
PLAINFIELD, N. J.



8-inch Searchlight on 4 H. P. Oldsmobile

"THE WORLD'S BEST BY EVERY TEST."

AUTO LEATHER.

The special finish of our Automobile leather makes it impervious to dust or rain, and enables it to be easily restored to all of its original brilliancy and depth of color, by using a damp cloth.

Our dull finish trimming leather is without an equal from every standpoint. No manufacturer can afford not to see our samples and learn our prices before purchasing trimming leather.

AMERICAN OAK LEATHER COMPANY,
Cincinnati, Chicago, St. Louis, Boston.

AMERICAN Indestructible Sparking Plugs



Stand the Test where all others are Knocked Out of Business. Every one we sell brings us more business. This fact shows what they are. The Original and Only Double Insulated Pure Mica Core. All others are worthless imitations.

AMERICAN COIL COMPANY
WEST SOMERVILLE, MASS.

AUTO SUPPLY CO., Broadway, Cor. 50th St., New York Agents.



STA-RITE
"STAYS RIGHT THE LONGEST"

We Counted Them!

There were 331 motor cylinders with spark plugs in them at the Chicago Auto Show. The STA-RITE was in 103 of these cylinders, and there were exactly twenty-nine different makes of plugs. The reason is—because they stay right longer than any other. We sell each of the seventeen sizes and parts by number and show twelve half-tone cuts in our catalogue. Get one right away.

Auto Jacks and Auto Clicks.

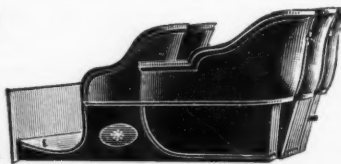
DETROIT MOTOR WORKS
DETROIT, MICH.

THE STA-RITE CO., 529 Broadway, New York and leading
435 Wabash Ave., Chicago dealers

The Automobile Supply Co.
Successors to The P. J. Dasey Co.
19 LaSalle Street, - CHICAGO, ILL.

We furnish everything necessary to build an automobile including motors 5 to 20 H. P. Send stamp for our catalogue of supplies.

Laminated
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BODIES
and
FENDERS



AMERICAN VENEER CO., 114 Market St., NEW ORANGE, N. J.

Portable Auto. Houses

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SPRINGFIELD MOULDING WORKS
Springfield, Mass.

LAMINATED WOOD BODIES=SEATS=MUD GUARDS

Let Us Quote You Prices on These Goods.

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A Guarantee of Gear Quality

is the above trade mark. It shows that we cut the gears on which it appears and guarantee them to be the accurate kind that transmit power with the minimum amount of waste. Let us quote you prices.

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For a free copy of Wabash World's Fair Folder containing a colored map of St. Louis and the World's Fair Grounds, together with beautiful half-tones of the principal buildings, address

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After you have tried other lamps and found them wanting, investigate the

Richmond Automobile Lamps

They will suit you.



Richmond Lamps are better than other lamps because they are made better—on better principles—they give more light and wear longer.

Our catalogue No. 4 tells all about them. Shall we send it to you?

Richmond, Ind. Mfg. Co.
RICHMOND, - - INDIANA

There is a Charm



about riding in a car equipped with

CONTINENTAL TIRES

which is absolutely distinctive. American sizes in stock. Your manufacturer will equip your car with them IF YOU INSIST.



The Continental Caoutchouc Co.

Emil Grossman, Manager

298 Broadway....New York

Factory, Hanover, Germany

DIETZ Lucifer Gas Lamp



As simple to use and operate as an oil lamp. Send for circular about it and our new styles of

OIL LAMPS



R.E. Dietz Co.

37 Lighthouse St.
New York, - N. Y.
ESTABLISHED 1840



THE OLD WAY

The Hill Automatic Starter

Can be attached to any Gasoline Car.

The operator mounts the car, pulls a small valve lever, throws in the clutch and the car moves off.

Write us what car you use, and we will tell you all about it.

THE STEEL BALL COMPANY
840 Austin Ave.....Chicago, Ill.

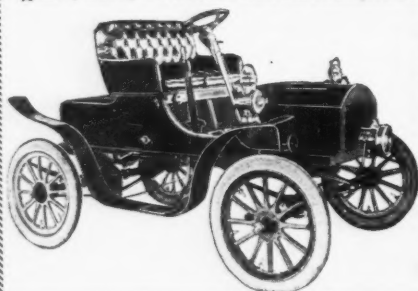


THE NEW WAY

The Courier

Built for American Roads

Mud, Sand and Hills shrink before it. A model of simplicity. Quiet, Safe, Powerful and Economical.



More power per pound than any other car on the market. Cylinder 4 5/8 x 5 3/4. The only Runabout equipped with sliding Gear Transmission on the market to-day. Agents wanted. Write for prices and catalogue.

Sandusky Automobile Co.,
Members of the Association
of Licensed Automobile Mfrs.
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SANDUSKY OHIO

PREMIER

"The Quality Car"

Rushing up hill at 20 miles an hour, where other cars take the low gear. Four cylinders (air cooled) do the work. Engine in front and accessible. Coil on dash. Oil pump. 16 H. P. to 1400 pounds. 32x3 1/2 inch tires; inclosed rear axle; powerful transmission. Every part built to wear and to stand the strain of American roads.

The Premier, a quality car for the gentleman driver who wants power, speed and accessibility. Get a catalogue.

Premier Manufacturing Co.
INDIANAPOLIS, IND.

JOHN WANAMAKER, New York and Philadelphia Distributor.
ARTHUR G. BENNETT, 20 Lake Street, Chicago Distributor.

MUD GUARDS

To Fit Oldsmobiles
Or Other Runabouts.

With Forged Irons Ready to Attach.

QUICK DELIVERY ON ONE SET
OR 500 SETS.

Interesting Prices if Ordered at Once.

WILSON & HAYES MFG. CO.,

750 Bellevue Ave., Detroit, Mich.

THE CHAINLESS WOLVERINE

A Live Proposition
For Live Agents

A Few of Its Characteristics Are:
Bevel gear drive with sliding gear transmission, three speeds ahead and reverse.

Speed range from 6 to 35 miles an hour

Long wheel base.

Large, high back tonneau.

Finest leather upholstery.

Space under tonneau floor to carry

extra tire, rain covers, etc.

Brakes positive and operated by foot.

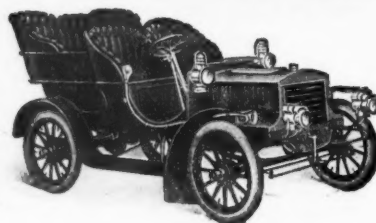
Wheels wooden of heavy artillery pattern, and fitted with

30x3 1/2-inch Diamond Tires.

Ignition by jump spark, automatically controlled

Sight feed oiling device on dash; 500 miles on one oiling.

Beautiful in appearance and handsomely finished.



PRICE
\$1750

THE REID MFG. CO., DETROIT, MICH.

New York Agents: HORACE B. DAY & CO., 60 W. 43d St., near 5th Ave.

The Apple

AT THE MERCY OF A
DOOR-BELL BATTERY

Why put \$1,200 to \$6,000 in an automobile and then place yourself at the mercy of unreliable batteries—many no better than the 20c. door bell kind.

The only perfect method of ignition is

The Apple Ignition Dynamo

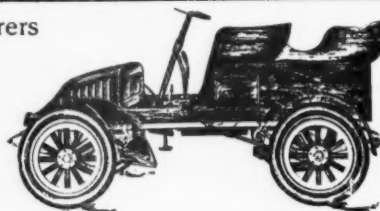
Always reliable. Attached in a moment. No trouble starting engine; makes a hotter, steadier spark that gives same more power and speed. Neat in design, Dirt, dust and oil proof.

Write now for particulars.

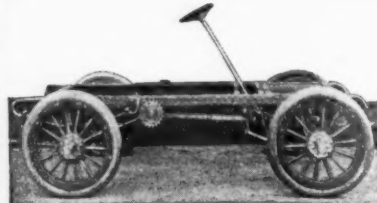
THE DAYTON ELECTRICAL MFG. COMPANY, 75 Riebold Building, DAYTON, OHIO



The Largest Manufacturers
of Automobile Parts
in America invite
the assemblers'
attention to
their new
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We supply parts and
sundries of every
description



J. H. NEUSTADT CO.

826-28-30 South 18th St.,
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MOTOR AGE

Gets the News :: Get Motor Age :: \$2.00 a Year

1303 MICHIGAN AVE. - CHICAGO, ILL.

PLAIN CITY, OHIO, April 11, 1904.
THE SWINEHART CLINCHER TIRE & RUBBER CO.,
Akron, Ohio.

GENTLEMEN: In reply to your inquiry of a few days ago as to how I found your tires used on my Haynes-Apperson car, will say that they are O. K. Have tried them in every way and find them to be superior to pneumatics. For example—I pulled a two-inch nail out of one of them after a long run the other day, and you know what that would have done to any pneumatic.



I wore out three sets of the latter since last July, and despite the advice of numerous friends, including the Haynes-Apperson people, I applied your tires, and am glad of it.

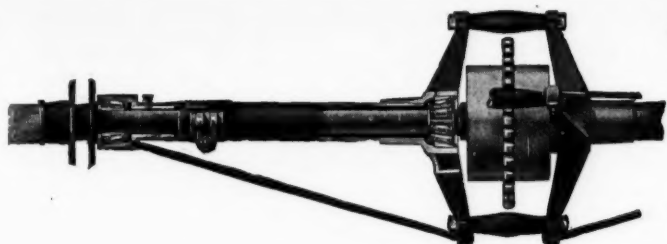
I did not answer your inquiry at once as I had not tried my rig on paved streets for skidding. You may refer anyone to me, or use this letter any way you see fit.

Yours truly,
L. E. ROBY.

THE SWINEHART CLINCHER TIRE & RUBBER CO.

New York Branch: 1784 Broadway

AKRON, OHIO



Steering Knuckles

Rear Axles

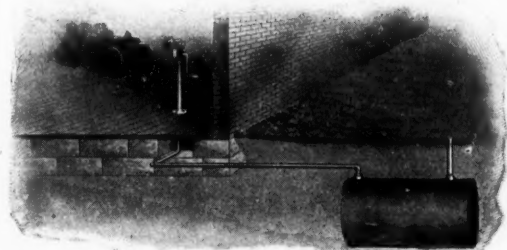
Artillery Wheels

Front Axles

Only Roller Bearing capable of taking up all wear.
Warranted for two years.

TIMKEN ROLLER BEARING AXLE CO., - - CANTON, OHIO

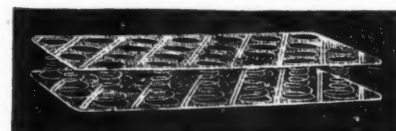
A Chicago Gasoline Storage Outfit is Safe and Economical



Avoids waste and evaporation.
Reduces insurance hazard.
Durable and easily operated.
Reasonable in price. :: :: ::

All Claims are Warranted. Write for Particulars.

Chicago Gasoline Storage Co.
521 Wabash Avenue, - CHICAGO, ILL.



Best Spring Seat in the World.

Used by many of the leading manufacturers. Requires no frame, burlap or webbing. Will retain shape for years. Send for descriptive matter.

BEST QUALITY.

LOW PRICE.

F. H. THOMPSON,

36-38 Elm Street.

PORTLAND, ME

RIMS

THE BEST STEEL
BEST WORKMANSHIP
Make the Best Rims

Electrically Welded



The Best Rims bear this Stamp
and are made by

WESTON-MOTT CO.

UTICA, N. Y.

STANDARD AUTOMOBILE PARTS

Pressed steel frames, pressed steel hubs, malleable hubs, brakes, steering gear, chains, transmission gears, engine cranks, mufflers, front axles (tubular and forged), rear axles (chain and bevel gear drive), electric truck parts.

FEDERAL MANUFACTURING COMPANY, CLEVELAND

SELLING AGENT-HAYDEN EAMES, American Trust Building, Cleveland

AUTOMOBILE
PARTS

METAL STAMPING

MANUFACTURERS ATTENTION!

Engines, Transmissions, Carburetors, Pumps, Lubricators, Steering Wheels, etc.

We are now making contracts for all kinds of machine work, metal stamping, special tools and dies, also complete parts. You undoubtedly have a certain amount of work on hand, which could safely be made outside of your own factory, which would be of some assistance to you and for which we may be especially adapted. Our specialty is **Contract Work**. Write us.

OTTO KONIGSLOW, . . . CLEVELAND, OHIO.

Ball Races, Dust Rings, Retainers, Radiator Discs, Washers, etc.

THE "Exide" BATTERY FOR ELECTRIC VEHICLES

DEPOTS FOR THE PROMPT
DELIVERY AND CARE OF
EXIDE BATTERIES

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BUFFALO, 200 Pearl St.
DETROIT, 265 Jefferson Ave.
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CHICAGO, 204 East Lake St.
ROCHESTER, 158 South Ave.
TOLEDO, 715 Jefferson Ave.
DENVER, 1510 Court Place.

THE ELECTRIC STORAGE BATTERY CO. Philadelphia, Pa.

SALES OFFICES: New York, Boston, Chicago, St. Louis, Cleveland, San Francisco, Toronto, Canada.

STEARNS

TOURING CARS

The F. B. Stearns Co., Cleveland, O.

CARPET

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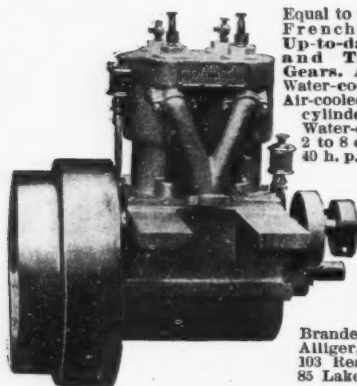
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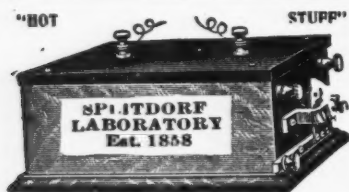
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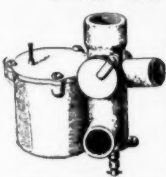


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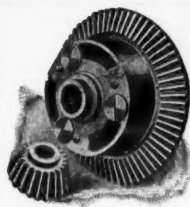
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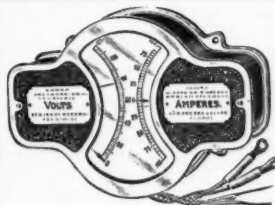
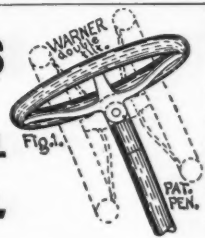
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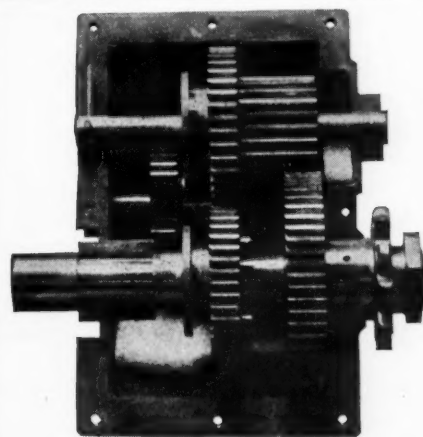
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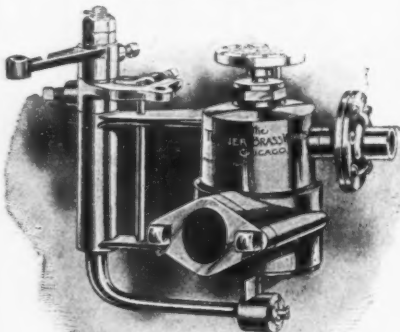
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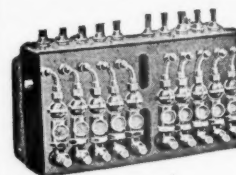
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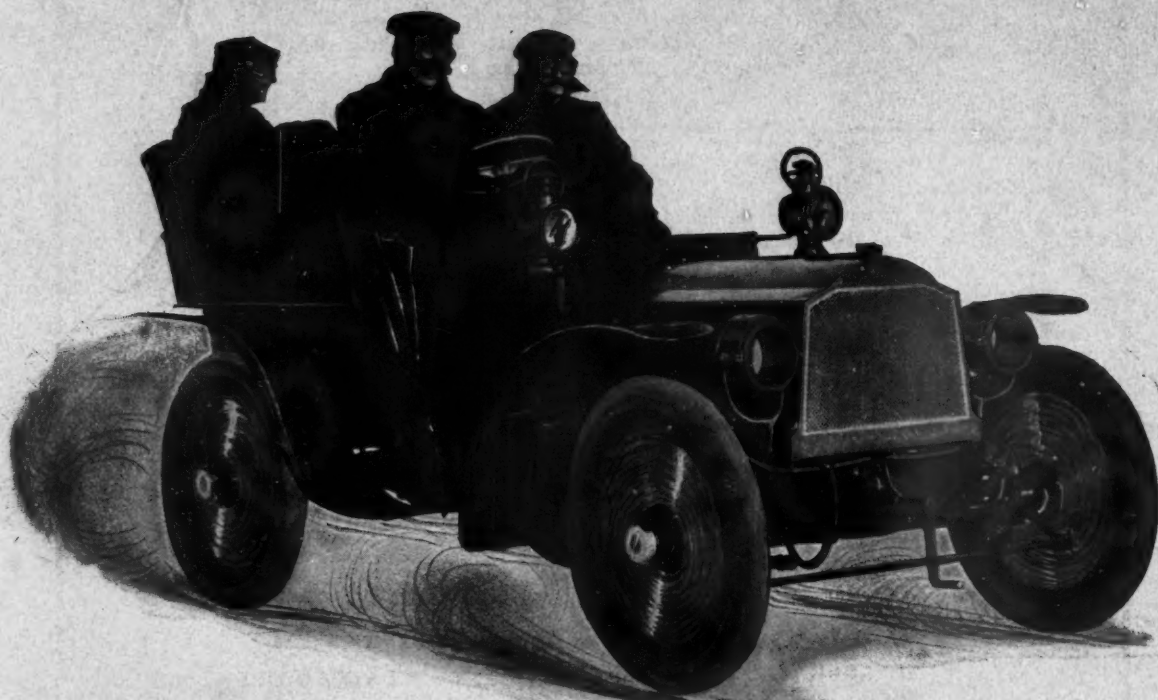


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